A CBO STUDY

Revising the Individual Income Tax

July 1983

Congress of the United States
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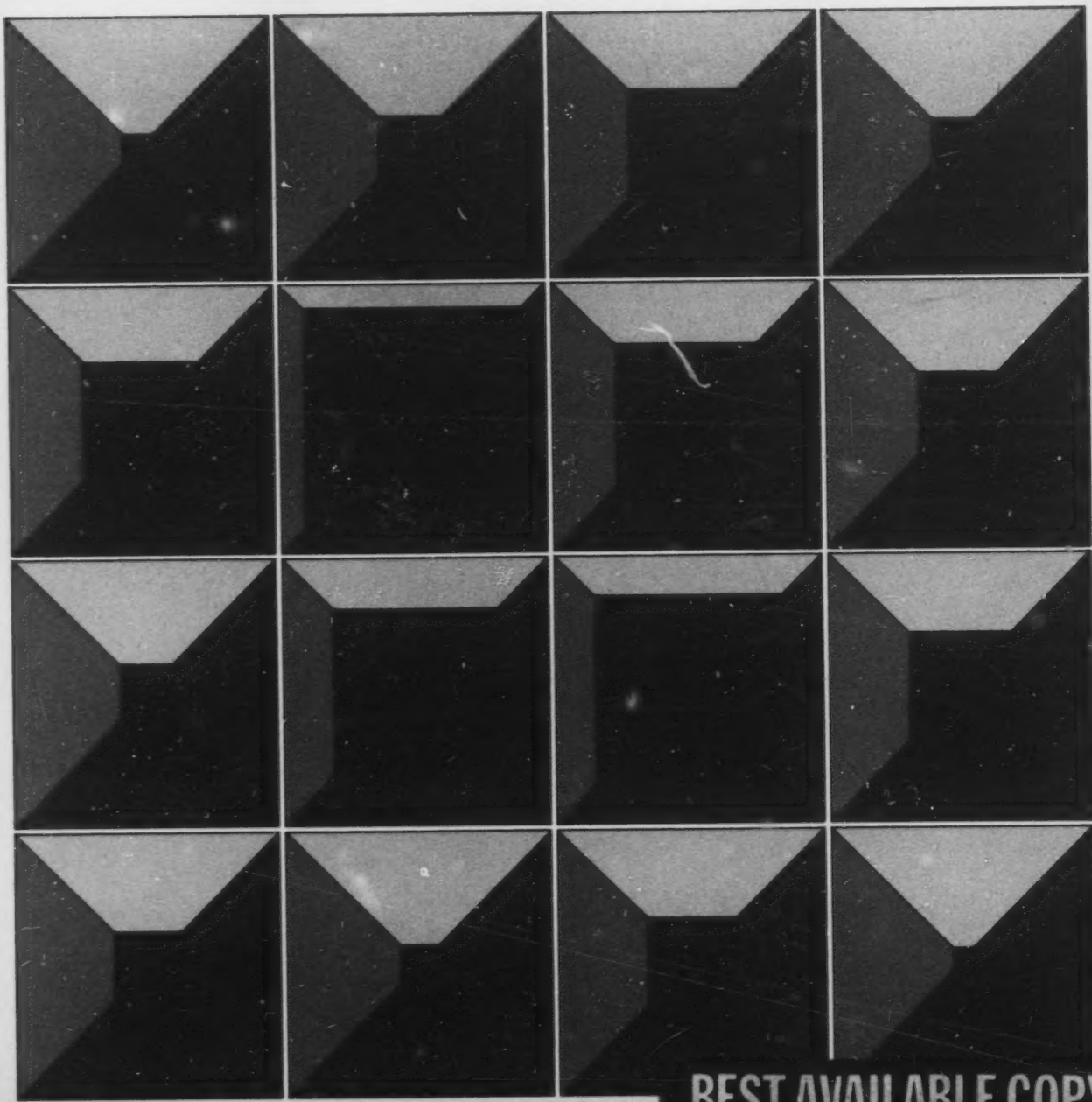

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REVISING THE INDIVIDUAL INCOME TAX

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PREFACE

Recent interest in major revision of the individual income tax has centered on three possible approaches: broadening the income tax base and reducing tax rates (possibly to one, flat rate); fully indexing the income tax for inflation; and taxing consumption rather than income. This paper, prepared at the request of Chairman Robert Dole of the Senate Finance Committee, analyzes the problems with the current income tax and provides a background for analyzing the proposals for change. In accordance with CBO's mandate to provide objective analysis, the report offers no recommendations.

Cynthia Francis Gensheimer of the Tax Analysis Division prepared the report under the direction of James M. Verdier. Martha J. Smith provided excellent research assistance and coordinated production of the several drafts. Patricia H. Johnston edited the manuscript and Nancy H. Brooks provided editorial assistance. Linda Brockman and Shirley Hornbuckle typed the publication.

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Director

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SUMMARY

INTRODUCTION

Many taxpayers and tax policy analysts are dissatisfied with the current individual income tax. They perceive that it is complex and unfair and that it impedes productivity and distorts economic decisions, particularly those concerning saving and investment. Although there is little agreement on the best remedy, considerable support exists for elimination of tax deductions, exclusions, exemptions, and credits in exchange for a significant reduction in marginal tax rates, including collapsing the current twelve tax brackets to three or four or to one "flat" rate. Many bills have been introduced in the Congress for these kinds of changes, generally called broadening the income tax base and reducing tax rates.

Although most public attention has focused on broadening the income tax base and reducing tax rates, economists have given considerable attention to two other ideas for major change: taxing consumption instead of income and indexing the income tax base (capital gains, interest income and expense, depreciation, and inventories) to eliminate the effects of inflation. The income tax base could be broadened with or without tax-base indexing.

The three reform proposals would have different revenue effects. Comprehensive income tax base broadening would allow significant reductions in tax rates while maintaining the same revenue yield. Rates would have to be somewhat higher under a consumption tax than under an equally comprehensive income tax in order to achieve the same overall revenue yield. Elimination of the corporate income tax would require higher rates under either an individual income or consumption tax to maintain the combined yield of the taxes. Indexing the income tax base for inflation would reduce revenues unless accompanied by elimination of tax preferences. This study summarizes the advantages and disadvantages of these three approaches to reform of the individual income tax system.

Broadening the Income Tax Base and Reducing Tax Rates

The many current tax deductions, exclusions, exemptions, and credits (called tax preferences or tax expenditures) complicate the income tax and, in many ways, contribute to its perceived unfairness. Because there are so many tax preferences, certain kinds of income are essentially

exempt from tax, leading to higher tax rates on the income that is taxed in order to raise the total desired amount of revenue.

High marginal tax rates induce taxpayers to seek legal and illegal ways to reduce their taxes. Because of the profusion of tax preferences, taxpayers with equal incomes pay widely different rates of tax, and most taxpayers feel that higher-income individuals are better able to use the preferences and so escape their fair share of the tax burden. At the same time, the complexity of the tax imposes heavy costs on all taxpayers and the Internal Revenue Service (IRS), and high marginal tax rates may discourage work effort and saving and cause the tax system to play a pronounced role in influencing investment decisions. The problems caused by high marginal tax rates and the proliferation of tax preferences could be addressed directly by broadening the income tax base and using the additional revenue to reduce tax rates.

Consumption Taxation and Income Tax Base Indexing

Many economists endorse consumption taxation or indexing the income tax base because they believe that the current tax distorts investment decisions and may discourage saving. The return from saving is now taxed at widely varying rates. Some earnings, like interest on municipal bonds, are exempt from tax, while the return on some tax-sheltered investments is essentially subsidized through the tax system and taxed at negative rates.

The uneven taxation of the return from saving is caused not only by tax preferences but also by inflation, which distorts the measurement of depreciation, interest, capital gains, and inventories, since tax is imposed on nominal rather than real changes in worth. As a result, inflation unevenly increases taxes on capital income. The real return on some capital gains and interest income is even taxed at rates above 100 percent. Partly in response to the effects of inflation, but more in an effort to encourage additional saving and investment, the Congress has enacted many tax incentives for saving and investment over the past few years. For instance, it raised from 50 to 60 percent the portion of long-term capital gains that are excluded from taxation, expanded Individual Retirement Accounts and Keogh accounts, and significantly liberalized depreciation rules. While these changes reduced the overall rate of tax on capital income, they may have worsened the unevenness in the tax rates applying to different kinds of saving and investment. Since investment dollars flow to the highest after-tax returns, a wide dispersion in tax rates on different investments causes a misallocation of investment resources and reduces the total national output below its potential.

Exempting all saving from taxation would encourage saving uniformly. Since a consumption tax is an income tax with an exemption for saving, it would reduce to zero the tax rate on all saving and eliminate the current distortions that favor some forms of saving and investment over others.

As an alternative to a pure consumption tax, the income tax could be retained, but the tax on all saving could be imposed at exactly the statutory tax rates. This could be accomplished by eliminating existing tax preferences for saving and investment and indexing for inflation the measurement of capital income in the income tax base. This would raise tax rates for investment currently receiving preferential tax treatment and reduce tax rates for investment currently receiving unfavorable treatment. Some advocate indexing the income tax base and retaining tax preferences for capital income as an intermediate approach between pure income and consumption taxation.

Criteria for Evaluation of Options

The three approaches to reform the current individual income tax--broadening the income tax base and reducing tax rates, indexing the income tax base for inflation, and taxing consumption instead of income--can be evaluated according to three criteria: simplicity, efficiency, and equity. Simplicity is gauged by ease of comprehension, tax planning, compliance, and IRS administration. Efficiency is measured by the degree to which the tax distorts the allocation of economic resources among investments and time periods and affects decisions on work and saving. Equity is determined by how fairly the tax treats those in similar economic circumstances and distinguishes among those in different circumstances.

BROADENING THE INCOME TAX BASE AND REDUCING TAX RATES

Comprehensive broadening of the income tax base would entail repeal of nearly all tax deductions, credits, exclusions, and exemptions, including, for instance, the deductions for charitable contributions and medical expenses and the exemptions from tax of government transfer payments (such as Social Security and Aid to Families with Dependent Children), fringe benefits, and interest on municipal bonds. Costs of earning income would continue to be deductible, so that net income, rather than gross receipts, would be taxed. With a comprehensive income tax base, tax rates could be much lower than current rates without changing the total yield of the tax.

Marginal Rate Reduction

Reducing tax rates substantially would have beneficial effects, whether the resulting tax had a single, flat rate or a new set of graduated rates. If the base was broadened and the rates reduced to a new, lower set of graduated rates, most taxpayers would face lower marginal tax rates, although some taxpayers who now make heavy use of tax preferences would face higher tax rates. If a single flat tax rate was adopted, many middle-income taxpayers would face somewhat higher marginal tax rates than they currently do, while many high-income taxpayers would have their marginal tax rates reduced substantially (by up to 20 percentage points). Some of the benefits of rate reduction for those facing lower rates would be offset, therefore, by the losses for those facing higher rates.

High marginal income tax rates impose a price in terms of reduced economic efficiency. Because the second member of a family to enter the labor force often faces particularly high tax rates under the current graduated-rate tax, work effort of these people, typically married women, is discouraged. (The first dollar earned by the second worker is taxed, in effect, starting at the tax rate on the last dollar of income of the first worker. The high tax rates on second workers were reduced somewhat by the two-earner deduction enacted in 1981.) Recent evidence suggests that even married men, long felt to be relatively unaffected by high tax rates, would desire to work 5 to 10 percent more hours per week if a broad-based, flat-rate income tax was adopted. With lower marginal tax rates, taxpayers would probably save more, pay more of the taxes they owe, engage in less barter of goods and services, prefer more remuneration in wages rather than fringe benefits, and invest more productively with less regard to tax considerations.

Reducing tax rates would simplify the tax code, especially if one flat rate was adopted. Less time and effort would be spent arranging to have income taxed at lower rates (after retirement, for instance, or to children), and there would be less need to allow taxpayers to average their incomes over several years. Under a flat-rate tax, inflation would no longer cause bracket creep (except for the relatively small amount caused by the personal exemption), although it would continue to distort the income tax base through effects on capital income, unless the base was indexed for inflation. A flat-rate tax could be designed to eliminate marriage bonuses and penalties, and a less progressive set of graduated rates would reduce them.

Obviously, an income tax with graduated tax rates is more progressive than a flat-rate tax with the same personal exemption, although even a flat-rate tax with a personal exemption is somewhat progressive because average tax rates rise somewhat with income. Whether a flat-rate or

graduated-rate tax is more equitable cannot be proved, but must be decided subjectively by the public and their legislative representatives, according to their assessments of the degree to which taxes should be used to redistribute income and of the degree to which the ability to pay tax increases with income.

Income Tax Base Broadening

Equity. Since broadening the tax base to eliminate tax preferences would reduce the wide variation in effective rates of tax within income groups, it would improve equity. On the other hand, repealing some of the preferences, such as the deduction for medical expenses and the extra exemption for the blind, might be perceived as lessening equity.

Efficiency. Economic efficiency would improve if the tax base were broadened to include income from all sources. In particular, the allocation of economic resources among investments would improve and national output would increase as investment decisions were influenced less by tax considerations. Elimination of tax preferences for saving might discourage saving, however, unless it was accompanied by substantial reductions in marginal tax rates.

Simplicity. Eliminating tax preferences would simplify the tax code, but taxing income not now covered would complicate it. Taxing transfer payments would bring more taxpayers into the system, unless personal exemptions were liberalized. Taxing other income--for example, fringe benefits, accrued life insurance, and imputed income from owner-occupied housing--might pose difficult valuation problems.

General Conclusions About Base Broadening and Rate Reduction

Unresolved Problems. Some lightly taxed income would probably continue to be lightly taxed under base broadening, because taxing it fully would require that assessments of value be made in the absence of market transactions. In this category is income from the use of owner-occupied housing and consumer durables and from services provided by an unpaid homemaker. Full taxation of capital gains and pension income is feasible but would be administratively complex.

Mismeasurement of the income tax base would continue during inflationary periods, unless the base was indexed for inflation. Unless business tax preferences were eliminated along with personal tax preferences, opportunities to shelter income from taxation would remain, although tax rate reduction would make tax shelters less lucrative.

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The double taxation of dividends--which discourages the corporate form of doing business, encourages debt as opposed to equity financing, and encourages retention of corporate earnings--would remain. This could be eliminated by the integration of corporate and individual taxes through the abolition of the corporate tax and taxation of stockholders' respective shares of corporate income. Complete integration, however, would be difficult to achieve under any graduated-rate income tax because of the difficulty of imputing annual retained corporate earnings to shareholders.

Transitional Problems. Even with phase-ins or grandfathering, a new comprehensive income tax would impose large windfall losses on owners of assets that currently receive preferential tax treatment and corresponding windfall gains for owners of currently unfavored assets. It would also adversely affect groups like charities and state and local governments that benefit from tax preferences. Graduated tax rates could be adopted so that the average tax paid by each income group would be about the same as under current law. Even so, under a comprehensive income tax, taxpayers who now make relatively little use of tax preferences would pay much less tax, while heavy users of tax preferences would pay more. A study that compared the 1976 income tax with a hypothetical broad-based income tax of equal yield and overall progressivity found that under the new tax roughly 23 million taxpayers would have faced tax increases greater than both $100 and 10 percent of their 1976 tax liabilities.

Hypothetical Flat-Rate Taxes. The Joint Committee on Taxation estimated that a flat tax rate of about 12 percent would raise the same amount of revenue in 1984 as the current individual income tax if the tax base was expanded by taxing all nominal capital gains in full and eliminating all personal exemptions, tax credits, and deductions, including the standard deduction. A flat rate of about 18.5 percent would be needed to raise this amount of revenue without eliminating any deductions, exemptions, or credits or in any other way changing the current tax base.

Under the current progressive individual income tax, average tax rates projected for 1984 range from about 5 percent for those with incomes between $5,000 and $10,000 to about 25 percent for those with incomes above $200,000. This degree of progressivity could be replicated with a lower set of graduated marginal tax rates applied to a broader tax base, but not with one flat rate. The flat tax rate would probably be between 15 and 20 percent, so that those high-income taxpayers currently paying higher average rates would get large tax cuts, and taxpayers currently paying lower rates would receive tax increases. The personal exemption would probably be set higher than it is currently in order to protect the lowest-income taxpayers from large tax increases. At the single tax rate that would then be needed to raise current levels of revenue, middle-income taxpayers would, on average, pay more tax than they now do.

INDEXING THE INCOME TAX BASE FOR INFLATION

The Problem

Inflation causes two distinct problems for an income tax, and each requires its own kind of indexing. The first--bracket creep--is caused when rising nominal incomes push taxpayers into higher tax brackets even though their real incomes have not changed. This problem will be eliminated with bracket indexing, a version of which goes into effect in 1985 as enacted in the Economic Recovery Tax Act of 1981.

In contrast to bracket creep, which affects income from labor and capital equally, the second inflation-caused problem affects only income from capital. Since investment expenditures are made before the resulting receipts, failure to measure capital expenditures and receipts in dollars of the same purchasing power causes capital income to be overstated and hence overtaxed during inflationary periods, even if tax brackets are indexed. Tax-base indexing would convert investment receipts and the costs of earning them to dollars of the same purchasing power, so that when expenditures are subtracted from receipts to calculate taxable income, the result would be an accurate measure of real income. Tax-base indexing would entail indexing capital gains, interest income and expense, depreciation, and the cost of production inputs taken from inventories.

Capital Gains. Tax is currently imposed on 40 percent of nominal long-term capital gain, which is the difference between the sale and purchase price of an asset, and is due only at sale, rather than annually during the course of ownership, whenever appreciation occurs. Some tax is collected on the sale of assets that have appreciated at or less than the inflation rate and that have experienced no gain in real value. Capital gains indexation would exempt from tax the portion of nominal gain needed to maintain the purchasing power of an initial investment, so that no tax would be due on the sale of assets whose prices just kept pace with inflation. The indexed capital gain on which tax would be due would be the sale price of an asset minus the purchase price adjusted for inflation.

Interest Income and Expense. All nominal interest income is currently taxed, even though much--sometimes most--is not real interest at all, but rather the amount required simply to maintain the purchasing power of the lender's principal. As a result, the rate of tax on real interest income can exceed 100 percent during inflation, so that some of a lender's principal as well as all of his real interest is collected in tax. The taxation of principal is worst during times of high inflation and for investors in the highest tax brackets. By the same token, because taxpayers are allowed to deduct all nominal interest paid, in many cases they can deduct much more

than 100 percent of real interest paid, so that the government, in effect, pays part of the loan principal through the tax system.

If interest income and expense were indexed for inflation, only real interest payments would be taxed and deducted, and the portion of interest that accounts for inflation would be left out. An imprecise, but fairly simple, approximation of interest indexation would be to tax only a specified percentage of nominal interest earned and allow only the same percentage of interest paid to be deducted.

Depreciation. During inflation, depreciation deductions erode in value because they are spread over many years and are based on an initial cost that is measured in terms of the price level at the date of purchase. Depreciation indexing would adjust annual depreciation deductions to reflect changes in the price level from year to year. Any schedule of depreciation deductions could be indexed for inflation so that the real value of the deductions would not change with inflation. Indexation should be superimposed on the depreciation schedules that would be preferred in the absence of inflation.

Production Inputs Taken from Inventories. When goods are purchased in advance of their use in production, inventories accumulate and inflation causes problems. If the cost of inventory goods used in production is taken to be the nominal amount originally paid for them (as under current law), during inflationary periods the true cost of production is understated and consequently income is overstated and overtaxed.

Indexing inventories for inflation would require that purchase prices of goods be translated into the dollars prevailing at the time of their use. Most indexing advocates recommend explicit indexing coupled with first-in-first-out (FIFO) tax accounting.

Overall Merits of Indexing the Income Tax Base

Equity. Tax-base indexing, accompanied by repeal of all tax preferences, would improve the equity of the tax. Taxpayers with the same real incomes would pay the same rate of tax, regardless of the nature of their investments or the way their income was split between earnings from labor and capital.

Efficiency. If the income tax base was indexed for inflation and all savings and investment tax incentives repealed, investment dollars would flow to their best uses, as measured by the highest before-tax rates of return. The overall level of saving might fall, however, if the tax preferences were repealed. If only one or several of the tax-base items

were indexed, or if indexation was not accompanied by repeal of existing tax preferences, the tax system would continue to distort the allocation of resources among investments.

Simplicity. Indexing the income tax base for inflation would complicate taxes, particularly for small businesses, individuals with capital income, and the IRS. The largest corporations, which already provide supplementary indexed income statement and balance sheet data for shareholders, would probably not face too much of an additional administrative burden. Repealing tax preferences for capital income at the same time could simplify taxes.

Revenue Effect. Indexing the income tax base without repealing tax preferences would cause a federal revenue loss. At least some of any loss could be recouped by repealing tax preferences. Indexing superimposed on the current tax would reduce taxes for individuals who have capital gain and interest income and would raise them for those who deduct interest payments. Homeowners with mortgages and businesses that had borrowed expecting to be able to deduct their entire interest payments could find it difficult to pay the additional tax.

TAXING CONSUMPTION INSTEAD OF INCOME

Since income is either spent or saved, an income tax with a deduction for saving is a tax on expenditure, or consumption. A consumption tax would be collected in much the same way as the current income tax, except that all saving would be treated similarly to deposits to Individual Retirement Accounts. Additions to saving would be tax deductible without limit, and withdrawals would be taxed in full unless reinvested. Withdrawals could be made at any time without penalty. Taxpayers would report all salaries, wages, dividends, interest, rental income, and proceeds from sales of assets. They would be allowed to deduct net additions to saving, such as deposits to savings accounts and purchases of stocks, bonds, and other income-producing assets.

Since borrowing is available for spending, it would be included in the tax base. Since repayment of debt is not available for spending, it would be deductible. If borrowing was not taxed, taxpayers would be able to profit by borrowing through saving the proceeds and taking a tax deduction for it, even though they had not changed their net saving.

A proportional consumption tax could be collected either in the manner just described or as a sales tax imposed on all final goods and services. It would be difficult, however, to make a sales tax progressive or to make it reflect differences in family size or other circumstances.

Equity

A consumption tax could be made as progressive as desired by enacting graduated marginal tax rates. For instance, tax rates could be set to replicate the progressivity of the current income tax.

Much saving and borrowing is done to smooth out annual consumption over a lifetime. For that reason, some feel that annual consumption is a better proxy for permanent lifetime income and hence a better tax base than is annual income. They reason that a consumption tax comes closer than an income tax to collecting equal amounts of tax from those with equal lifetime incomes. Proponents of consumption taxation argue that saving is taxed twice under an income tax: once when the income is initially earned, and again when the savings earn interest.

Since consumption is highest relative to income during youth and retirement, under a consumption tax, taxpayers would generally pay more tax in those years and less in midlife than under an income tax. Those who have saved early in life would pay less tax under a consumption tax than under an income tax. Unless taxed on their estates at death, extremely frugal people would pay little tax, even though they might have high incomes.

Some consider income to be a fairer base for taxation than consumption because they think a lifetime perspective is too long or because all income represents power to consume or save. Since all income could potentially be consumed, it is immaterial in this view whether income is in fact saved or spent.

Efficiency

Because money saved would not be taxed under a consumption tax, the return to saving would be exempt from tax. In other words, the after-tax return to saving would be the same as the before-tax return. Economic efficiency would be improved because the tax would not influence the decision to save, nor would it fall more heavily on some kinds of investment than on others, as the current income tax does. On the other hand, because saving would be deductible under a consumption tax, the base of a consumption tax would be somewhat smaller than the base of an equally comprehensive income tax. Therefore, tax rates would have to be higher (probably by 5 to 10 percent) than under an income tax, imposing greater distortions on the choice between leisure and working to finance current consumption, between untaxed fringe benefits and wage income, and between market and nonmarket work done to finance current consumption. Studies that have attempted to determine whether consumption

taxation increases overall economic efficiency have reached conflicting conclusions, although most predict that a consumption tax would probably increase the saving rate and economic efficiency.

Simplicity

A consumption tax would greatly simplify tax accounting for businesses but not affect it much for average taxpayers. The corporate income tax would probably be abolished or retained in a simpler form. The costs of business plant, equipment, and raw materials would be deducted by the self-employed (and by corporations if a corporate tax were retained) in the year of purchase (expensed), rather than depreciated, rendering unnecessary the complicated depreciation and inventory accounting of current law and the indexation of depreciation and inventories for inflation. Since all the proceeds of the sale of assets would be available for consumption, it would all be taxed, obviating the need to differentiate between capital gains and other income and to index capital gains for inflation. Tax compliance could worsen, however, since the incentive not to report asset sales would be greater because tax would be due on the entire sale proceeds, not on just the capital gains.

Other Advantages and Disadvantages of Consumption Tax

Integration of Corporation and Individual Taxes. Integration of corporation and individual taxes would be easy to achieve under a consumption tax, since retained earnings not available for consumption would appropriately not be taxed. When retained earnings were reflected in higher proceeds from stock sales, they would be taxed under a consumption tax, and dividends would be taxed each year unless reinvested by shareholders. If the corporation income tax was abolished, however, revenue now raised from that tax would have to be collected under the individual consumption tax, requiring higher tax rates. Moreover, some favor retaining a corporation income tax because it makes the tax system more progressive or because it is a tax on the privilege of doing business as a corporation.

Remaining Problems. Some problems with the income tax would not be solved by a consumption tax. It would still be difficult to tax fringe benefits and nonmarket work, to decide whether to tax families or individuals, and to improve tax compliance.

Some new problems would arise with a consumption tax. During the transition, taxpayers could be taxed twice: first on savings made from income taxed under the income tax and again when they spent those

savings to consume. Some people, current retirees in particular, could, therefore, face big tax increases. More generally, people who save little and consume early in their lifetimes would pay more in tax under a consumption tax, and savers would pay less. Moreover, since it would be easier to amass sizable wealth under a consumption tax, the concentration of wealth might increase, unless there were offsetting increases in estate and gift taxes or a new wealth tax were enacted. To the extent that special tax inducements to invest in particular ways were retained or exclusions enacted for certain kinds of consumption (housing, education, or medical care, for instance), some of the potential simplicity and efficiency gains of a consumption tax could be lost.

CONCLUSION

Although each major option for change--broadening the income tax base and reducing rates, indexing the income tax base for inflation, and taxing consumption instead of income--has much to recommend it, some major problems would remain under each approach, and the transitional costs of moving to any significantly different new tax could be great; the more different the new tax, the greater the costs. The Congress need not adopt any of these plans wholesale, but could instead make incremental changes, such as repealing selected tax preferences, to move gradually toward one of the prototypes.

CHAPTER I. INTRODUCTION

The current individual income tax is widely perceived to be complex, unfair, and a contributing factor to a slowdown in national productivity and growth. Consequently, several fundamental alterations of the tax are receiving serious consideration. Most of the proposals for change would neither increase nor decrease the total yield of the tax, but they could be modified to raise additional revenues and narrow the deficit without depressing productivity and economic growth as much as raising the rates of the current tax would.

Opinion surveys report widespread dissatisfaction with the individual income tax and at least general support for major change. Thirty-six percent of the public feels that the federal income tax is the most unfair tax (compared to state income, state sales, and local property taxes).[1] Sixty-two percent of the public favors an income tax with a flat rate of 14 percent and very few deductions, although when polled on specific tax deductions, a majority advocated retaining most of the larger deductions.[2]

Many major tax reform bills have been introduced in Congress, most of which call for a flat tax rate or a progressive rate schedule and the elimination of all or most special tax deductions, exclusions, exemptions, and credits (called tax expenditures or tax preferences). Some members of

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1 According to a survey conducted by the Advisory Commission on Intergovernmental Relations, the federal income tax has been increasingly perceived to be the least fair of the four taxes. Nineteen percent of the United States public felt that the income tax was the least fair tax in 1972, 30 percent in 1973, 30 percent in 1974, 28 percent in 1975, 28 percent in 1977, 30 percent in 1978, 37 percent in 1979; and 36 percent in 1980, 1981, and 1982. (Advisory Commission on Intergovernmental Relations, Changing Public Attitudes on Governments and Taxes, 1982, p. 4.) Even so, 41 percent of the public feels that the federal income tax is fair, compared to 43 percent in 1978. (New York Times/CBS News Poll, New York Times (April 15, 1983).)

2 More than 50 percent of respondents favored retaining deductions for medical expenses, home mortgage interest, charitable contributions, state and local income and property taxes, casualty and theft losses, and state and local sales taxes. ("A Loss of Faith in the Progressive Tax," Business Week (September 6, 1982), p. 15.)

the Administration have endorsed this approach, and the Senate Finance Committee held hearings on it in September 1982.

This study surveys the pros and cons of the flat-rate, broad-based income tax approach and of two other proposals that have received more attention from economists than from the public: indexing the income tax completely for inflation and abolishing the current income tax and substituting a tax on consumption or expenditures.

SOURCES OF THE CURRENT DISCONTENT

Dissatisfaction with the current income tax is multifaceted. Apart from dissatisfaction with the level of taxation, which presumably would not abate if a different tax of equal yield were adopted, complaints center around the income tax's complexity; a perception that it is unfair and that tax evasion is on the rise; discontent with high marginal tax rates;[3] and concern about the tax treatment of capital income, particularly during periods of inflation.

High Marginal Tax Rates and Profusion of Tax Preferences

Partly to promote social goals like homeownership and energy conservation and partly to provide relief for taxpayers in a variety of situations, the Congress has enacted many tax preferences. As a result, the tax code is extremely complicated, and marginal tax rates are relatively high on the income that is taxed so that the desired level of revenues can be raised.

Complexity. About 40 percent of taxpayers seek professional help in filling out their tax returns, some because they cannot figure out how to do it themselves.[4] Moreover, many of those who prepare their own returns spend a substantial amount of time doing so.[5] In addition to the time spent

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3 The marginal tax rate is the percentage of tax collected on a dollar of additional income.

4 According to preliminary statistics, paid preparers filed 40.1 percent of all returns in 1982. (Telephone conversation with Dodie Reilly, Internal Revenue Service, May 25, 1983.)

5 Roughly 300 million hours are spent each year to fill out the 1040 and 1040A tax forms and supporting documents, according to the Office of Management and Budget (August 1982).

preparing returns, much time and effort is devoted to learning about tax provisions and planning financial decisions accordingly.

Administering the income tax is a formidable task. Demands on the Internal Revenue Service (IRS) are heavy--for information, revenue rulings, form preparation, and auditing. Monitoring compliance with each of the many complicated tax provisions is difficult, especially because the IRS is often pitted against financial experts who specialize in the various provisions.

Fairness. High statutory marginal tax rates may encourage some taxpayers to go "underground" or to make more intensive use of tax expenditures. Estimates of the underground economy's size and the associated loss in income tax revenue are necessarily unreliable, and they tend to vary widely depending on the estimation technique. The IRS has estimated that the revenue lost through noncompliance in the legal and illegal (drugs, gambling, prostitution) sectors by individuals and corporations has tripled in eight years--from $31.5 billion in 1973 to $95 billion in 1981.[6]

High marginal tax rates make it lucrative to seek legal ways to reduce taxes. As a result of some taxpayers modifying their behavior to reduce taxes and others finding themselves qualifying automatically for tax preferences, taxpayers with equal incomes pay widely different amounts of tax. Consequently, the income tax is not as progressive as is implied by the schedule of statutory tax rates. Many taxpayers thus feel that the tax is unfair; they believe that they pay more tax than the family next door with the same income, and that a family with higher income does not pay as much additional tax as it should.

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6 Statement of Roscoe L. Egger, Jr., Commissioner of Internal Revenue, before the Committee on Ways and Means (May 18, 1982), p. 4. A 1979 IRS study estimated the revenue loss from noncompliance in the legal and illegal sectors for 1976 was in the range of $19 billion to $26 billion. (See Internal Revenue Service, Estimates of Income Unreported on Individual Income Tax Returns (September 1979), pp. 11, 17.) The IRS is reviewing the 1981 estimates because some outside experts believed that they were too large. One study estimated that in 1976, between $4.5 billion and $6.7 billion in annual tax evasion was due to the increase in taxes that occurred between 1929 and 1976. (See Vito Tanzi, "Underground Economy and Tax Evasion in the United States: Estimates and Implications," p. 86, in Vito Tanzi, ed., The Underground Economy in the United States and Abroad (1982).)

Economic Distortions. The combination of high tax rates and a large number of tax preferences distorts economic decisions. A number of studies, reviewed in Chapter IV, suggest that the current tax reduces the overall levels of work effort, saving, and investment, and distorts the allocation of economic resources.

Problems in the Taxation of Capital Income

Many forms of capital income are currently exempt from income tax or receive preferential tax treatment, whereas other forms are taxed at rates above 100 percent in real terms--more than double the maximum statutory rate of 50 percent for interest income and five times the maximum effective rate of 20 percent for capital gains. The very high tax rates occur because the income tax is not indexed for inflation. For example, tax is due on capital gains from sales of assets whose prices rise in nominal value but actually fall in real value because they do not rise by as much as the general price level.

The Congress enacted several new tax incentives for saving and investment in the Economic Recovery Tax Act of 1981 (ERTA). It liberalized Individual Retirement Accounts, Keogh accounts, and depreciation, and authorized tax-exempt "All Savers' Certificates" and an exclusion from taxable income of 15 percent of net interest received. The changes reflected an expressed concern that Americans save less than is socially desirable, partly because the tax system itself discourages saving, particularly during inflationary periods.

These ad hoc changes, grafted onto a tax system that already had widely varying tax rates on different kinds of saving, may impede the flow of resources to their most productive uses and aggravate the perception that the income tax is complicated and unfair. The net result may be lower-than-potential economic growth. In addition, because much saving is now exempt from tax while interest on borrowing is tax deductible, many taxpayers can profit by borrowing to invest in tax-exempt savings accounts.[7] While this kind of behavior (called "arbitrage") reduces taxes for those who engage in it, it does not increase total saving, it wastes resources in the transactions, and it costs the government revenues.

As shown in Table 1, effective tax rates on new investment vary widely depending on the asset, the industry, the source of financing (debt

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7 Although tax law disallows deductions for interest paid on debt used to purchase tax-exempt securities, the provision is difficult to enforce since borrowed money is fungible.

TABLE 1. EFFECTIVE MARGINAL TAX RATES ON CAPITAL INCOME FOLLOWING THE TAX EQUITY AND FISCAL RESPONSIBILITY ACT OF 1982 (In percents)[a]

Capital Income	Inflation Rate		
	Zero	6.77	10.00
Asset			
Machinery	-0.3	11.0	15.7
Buildings	27.4	33.2	34.7
Inventories	50.9	47.0	45.5
Industry			
Manufacturing	38.4	46.4	49.0
Other industry	7.9	11.4	12.4
Commerce	29.6	30.5	30.5
Financing			
Debt	-8.9	-23.5	-29.1
New issues of stock	57.8	87.7	101.2
Retained earnings	43.9	57.3	61.7
Owner			
Household	39.7	52.7	57.2
Tax-exempt institution	-3.5	-29.8	-45.3
Insurance company	-3.0	17.3	39.2
Overall	28.7	31.5	33.0

SOURCE: Mervyn King and Don Fullerton, eds., "The United States," The Taxation of Income from Capital, Discussion Paper No. 37 (Princeton University, Woodrow Wilson School of Public and International Affairs, December 1982), Figure 6.28.

a. Present value of federal income tax, state income tax, and state and local property tax paid as percentage of the return to one dollar of additional investment on the part of all owners of the specified asset. (Assumes all investments begin with a 10 percent pretax return.) For an explanation of the economic model used to generate these results, see Mervyn King and Don Fullerton, eds., "The Theoretical Framework," in The Taxation of Income from Capital: A Comparative Study of the U.S., U.K., Sweden, and West Germany, Discussion Paper No. 36 (Princeton University, Woodrow Wilson School of Public and International Affairs, December 1982).

or equity), the owner (household, tax-exempt institution, or insurance company), and the inflaton rate. Although some capital income is taxed at extremely high rates, some is actually subsidized, as indicated by the negative entries in Table 1.

MAJOR PROPOSALS FOR CHANGE AND PLAN OF THE REPORT

The problems posed by the combination of a large number of tax preferences and high marginal tax rates could be met head on by eliminating tax preferences (this is called broadening the tax base) and reducing tax rates. The rates could be reduced to one rate for all taxpayers--a flat rate--or to a new set of graduated marginal tax rates.

The current problems in capital income taxation could be dealt with comprehensively in two ways--by taxing consumption rather than income or by indexing the income tax base for inflation. Since a consumption tax is an income tax with an exemption for all saving, it does not tax the return to saving and hence does not favor one form of saving over another or distort investment decisions. Moreover, as will be explained below, none of the serious problems that inflation poses for an income tax would exist under a consumption tax.

If the income tax is retained, the distortions caused by inflation for the taxation of capital income could be eliminated by indexing capital gains, interest income and expense, depreciation, and costs of materials. This kind of indexing, called "tax-base indexing," converts the value of these items to constant dollars, so that, rather than being measured in nominal terms as they are now, they would be measured in real terms. Tax-base indexing would probably be accompanied by elimination of some or all tax preferences for saving and investment.

The report begins in Chapter II with a brief discussion of the evolution of the individual income tax. Chapter III sets forth the criteria for evaluating the income tax and proposals to change it. The major options for change are discussed in the remaining chapters. Chapter IV deals with broadening the income tax base and reducing tax rates, Chapter V with indexing the income tax base for inflation, and Chapter VI with taxing consumption. Chapter VII contains a short conclusion.

CHAPTER II. EVOLUTION OF THE INDIVIDUAL INCOME TAX

Current problems with the individual income tax are perhaps better understood by placing today's tax in a historical perspective. Recent interest in broadening the tax base and reducing tax rates would be readily explained, for instance, if it could be shown that the tax base has been consistently eroding and tax rates consistently inching upward over the past decade or two. Unfortunately, no such easy explanations are forthcoming.

As discussed below, the average rate of individual income taxation for the nation as a whole has increased, but not dramatically, since World War II.[1] The dispersion in average and marginal tax rates also has increased since 1960, with marginal tax rates now higher for most high-income taxpayers and lower for low-income taxpayers. Although less than half of personal income is currently subject to income taxation, this is not particularly low by post-World War II standards. The methods by which income is sheltered from taxation have changed markedly, however, over this period. In 1947, personal exemptions and standard deductions accounted for roughly half of all income not subject to tax. Between 1947 and the present, the relative value of personal exemptions was sharply eroded, and the number and use of special exclusions, itemized deductions, and credits increased dramatically. One of the most significant changes in the individual income tax during the postwar period was the growth of these special tax preferences.

This chapter highlights key aspects of the evolution of the individual income tax. It summarizes trends in the overall yield of the tax, the size and composition of the tax base, and levels of average and marginal tax rates. The chapter concludes with a discussion of the changes contained in the Economic Recovery Tax Act of 1981.

HISTORICAL PERSPECTIVE OF THE INDIVIDUAL INCOME TAX

Growth in Tax Receipts

Income was first taxed in the United States for a few years during and after the Civil War but then not again until 1913 following ratification

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1 The average tax rate is the percentage of total income taken in tax.

of the Sixteenth Amendment. The individual income tax in America has always had graduated marginal rates.[2] In 1913, tax rates ranged from 1 to 7 percent. Less than 1 percent of the population had to pay the tax, which yielded only one-tenth of one percent of personal income.[3] Until World War II, the income tax applied to a small percentage of the population (under 10 percent), and yielded less than 2 percent of personal income. By 1945, however, nearly three-quarters of the population was covered and about 10 percent of personal income was paid in tax.[4]

Since World War II, revenue from the individual income tax has remained between 7 and 12 percent of personal income.[5] The ratio of receipts to income was highest during the Korean and Vietnam Wars, although the gradual upward trend in receipts that began in 1975 culminated with receipts in 1981 matching the previous high of 12 percent of personal income reached in 1969, as shown in Table 2. In comparison, receipts from social insurance taxes rose much faster, from 3 percent of personal income in 1947 to 8 percent in 1981.[6] The individual income tax contributed between 40 and 45 percent of total federal receipts during most of the post-World War II period, as shown also in Table 2.

The individual income tax is the largest source of federal revenues. It yielded about $300 billion in fiscal year 1982 and is expected to remain at roughly that level for 1983. Social insurance taxes, the next largest

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2 Other countries have had flat-rate personal income taxes. The experiences in Great Britain from 1842 to 1880 and currently in Hong Kong are described in Robert Hall and Alvin Rabushka, Low Tax, Simple Tax, Flat Tax (New York: McGraw Hill Book Company, 1983).

3 Richard Goode, The Individual Income Tax (Washington, D.C.: The Brookings Institution, 1976), pp. 3-4.

4 Ibid., p. 4.

5 State and local individual income tax receipts have grown significantly since World War II, from 0.4 percent of personal income in fiscal year 1950 to 2.0 percent in fiscal year 1982. Federal individual income tax receipts declined from 95 percent of federal, state, and local individual income tax receipts in fiscal year 1950 to 85 percent in 1982. (Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism 1981-1982 (April 1983), pp. 30-31.)

6 Department of Commerce, Bureau of Economic Analysis, "National Income and Product Accounts of the United States," Survey of Current Business (September 1981 and April 1982).

TABLE 2. GROWTH OF THE INDIVIDUAL INCOME TAX, SELECTED CALENDAR YEARS 1930-1981

Year	Individual Income Tax As a Percentage of	
	Personal Income	Total Federal Receipts
1930	1.4	34.3
1935	0.9	14.3
1940	1.3	11.7
1945	10.9	43.5
1950	7.7	34.8
1955	9.8	41.9
1960	10.4	43.5
1965	9.4	41.1
1969	12.1	46.5
1970	11.0	46.3
1972	10.8	45.2
1974	10.8	43.9
1976	10.2	42.7
1978	10.9	43.9
1980	11.6	46.4
1981	12.0	46.3

SOURCE: Department of Commerce, Bureau of Economic Analysis, "The National Income and Product Accounts of the United States," Survey of Current Business (September 1981), pp. 73-75, 122-123; (July 1982), pp. 12, 47.

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source of revenue, produced only about two-thirds that amount in 1982, and corporate income taxes brought in only about $49 billion in fiscal year 1982 and are expected to drop to $40 billion in 1983.[7]

Although the average tax rate of the individual income tax for the population as a whole did not increase much during the post-World War II period, both the tax base and rate structure underwent major changes during that period.

Changes in the Tax Base

Between calendar years 1947 and 1979, the tax base (income taxed at a positive rate) was consistently half or less of personal income. The tax base grew from 40 percent of personal income in 1947 to 51 percent in 1969 and then fell back to 46 percent in 1979.[8] The difference between personal income and the tax base results from tax exemptions, exclusions, deductions, unreported income, and income offset by tax credits. The relative importance of these items changed dramatically from 1947 to 1979.

Personal exemptions decreased sharply as a percentage of personal income between 1947 and 1979, as did the category of income of nontaxable individuals and income not reported to the IRS, as shown in Table 3. On the other hand, income excluded from tax--mostly government transfer payments, fringe benefits, and interest on tax-exempt bonds--increased sharply. Itemized and standard deductions and income offset by tax credits also rose as a percentage of personal income.

Not only did the use of existing tax expenditures increase sharply during the postwar period, but many new preferences were enacted. For instance, the number of provisions giving special individual or corporate tax relief increased from 50 in 1967 to 104 in 1982.[9]

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7 Congressional Budget Office, Baseline Budget Projections for Fiscal Years 1984-1988 (February 1983), p. 24.

8 Eugene Steuerle and Michael Hartzmark, "Individual Income Taxation 1947-1979," National Tax Journal (June 1981), p. 162.

9 Congressional Budget Office, Tax Expenditures: Current Issues and Five-Year Budget Projections for Fiscal Years 1982-1986 (September 1981), p. 8.

TABLE 3. COMPOSITION OF PERSONAL INCOME NOT SUBJECT TO TAX (NOT PART OF THE TAX BASE), CALENDAR YEARS 1947 AND 1979 (As percentage of personal income)

	1947	1979	Change Between 1947 and 1978
Personal Exemptions	23.3	7.7	-15.6
Income of Nontaxable Individuals and Nonreported Income[a]	19.6	9.4	-10.2
Net Exclusions[b]	9.1	18.4	+9.3
Itemized Deductions	3.7	9.1	+5.4
Standard Deductions	4.5	6.7	+2.2
Income Offset by Credits	0.0	5.2	+5.2
Total Income Not Subject to Tax	60.2	56.4	-3.6

SOURCE: Eugene Steuerle and Michael Hartzmark, "Individual Income Taxation 1947-1979," National Tax Journal (June 1981), pp. 161-162, 165.

NOTE: Details may not add to totals because of rounding.

a. Adjusted gross income on nontaxable returns and the difference between adjusted gross income estimated by the Bureau of Economic Analysis (BEA) and that reported to the IRS. This difference is made up of income not reported to the IRS by those who file tax returns, income of nonfilers, and the residual of differences between the IRS and BEA measures of other variables.

b. Nontaxable transfer payments, fringe benefits, interest on tax-exempt bonds, deposits to Individual Retirement Accounts, moving expenses, and other income excluded from tax.

TABLE 4. DISTRIBUTION OF TAX RETURNS BY MARGINAL TAX RATE,[a] CALENDAR YEARS 1961, 1969, 1979 (In percents)

Marginal Tax Rate	1961	1969	1979
0 - 14	0.00	9.59	10.06
15 - 19	0.00	16.97	24.70
20 - 22	87.80	9.38	19.94
23 - 31	10.04	57.48	27.36
32 - 72	2.15	6.57	17.93
73 - 91	0.01	0.02	0.00
Total	100.00	100.00	100.00

SOURCE: Eugene Steuerle and Michael Hartzmark, "Individual Income Taxation 1947-1979," National Tax Journal (June 1981), p. 164.

a. Includes only tax returns with positive tax liability.

Changes in Marginal and Average Tax Rates[10]

Marginal Tax Rates. During the 1960s and 1970s, the Congress enacted several tax cuts, but "bracket creep," caused by the inflation of the 1970s, pushed taxpayers into higher marginal tax brackets even with no change in their real incomes.[11] In 1961, although statutory marginal tax rates were steeply graduated, ranging from 20 to 91 percent, the income tax was essentially a flat-rate tax for all but the highest-income taxpayers. As shown in Table 4, nearly 88 percent of taxpayers fell into marginal tax

10 The marginal tax rate is the percentage of tax collected on a dollar of additional income, whereas the average tax rate is the percentage of total income taken in tax. Since savings and work decisions are based partly on the after-tax return to additional effort, marginal tax rates are important in evaluating the effect of an income tax on these decisions. Average tax rates, on the other hand, indicate the overall burden of the income tax as a share of income.

11 Taxpayers were pushed into higher tax brackets when their real incomes increased as well.

brackets of 20 to 22 percent.[12] By 1969, 64 percent of taxpayers faced marginal tax rates above 22 percent. By 1979 marginal rates were sharply graduated--ranging from 14 to 70 percent--with 35 percent of taxpayers taxed at rates below 20 percent, and 18 percent at rates above 31 percent.[13]

The dispersion in marginal tax rates that occurred between 1960 and 1980 can also be observed by charting the rates at various points along the income distribution. The Treasury Department did this for taxpayers with median income, half median income, and twice median income.[14] The marginal income tax rate for four-person families at half median income dropped from 20 percent in 1960 to 14 percent in 1965 and then rose to 18 percent in 1980. Marginal rates for median income families rose from 20 percent in 1960 to 24 percent in 1980, and rates for families at twice median income increased from 22 percent in 1960 to 43 percent in 1980.

Average Tax Rates. Between 1954 and 1975, average tax rates decreased for low-income taxpayers, stayed about the same for middle-income taxpayers, and increased for those above the middle-income range. Families with real incomes of $15,000 and less (expressed in 1975 dollars) experienced declines in their average tax rates between 1954 and 1975; those with incomes of $20,000 in 1975 paid the same average tax rate in 1975 as they did in 1954; and those with higher incomes paid higher rates in 1975 than in 1954.[15]

The combined effects of bracket creep and the legislated tax cuts that occurred between 1967 and 1979 were studied by the Congressional

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12 Steuerle and Hartzmark, "Individual Income Taxation," p. 164.

13 Ibid., p. 164.

14 Department of Treasury, Office of Tax Analysis, April 13, 1981. Reprinted in Charles R. Hulten and June A. O'Neill, "Tax Policy," in John L. Palmer and Isabel V. Sawhill, eds., The Reagan Experiment (Washington, D.C.: The Urban Institute Press, 1982), p. 104.

15 Average tax rates are defined as tax liability divided by adjusted gross income. Comparing 1965 with 1975 tax rates yields basically the same result, with those in the $15,000 income group paying roughly the same average rate of tax in 1975 as in 1965, those with incomes less than $15,000 paying a lower average rate in 1975 than in 1965, and those with higher incomes paying a higher rate in 1975 than in 1965. (Benjamin Bridges, Jr., "Intertemporal Changes in Tax Rates," Social

Budget Office (CBO).[16] CBO compared the distribution of tax liabilities by income group under the tax law in effect in 1979 with the distribution that would have prevailed had 1967 law been kept in place but indexed automatically for inflation (indexed bracket widths, standard deduction, and personal exemption). Low-income taxpayers paid considerably less tax in 1979 than they would have had the income tax been indexed automatically for inflation, and upper-income taxpayers paid considerably more. Those in the $5,000-$10,000 income group, for instance, paid on average $148 less tax in 1979 than they would have under an indexed income tax, and those with incomes above $200,000 paid on average $15,000 more tax than they would have under indexation.

THE ECONOMIC RECOVERY TAX ACT OF 1981

Relative to the receipts that would have been collected in fiscal years 1982-1984 under a continuation of prior law, the 23 percent across-the-board marginal tax rate cuts and the reduction in top marginal tax rate from 70 to 50 percent embodied in the Economic Recovery Tax Act of 1981 (ERTA) were estimated to reduce revenues by about $178 billion.[17] Had no tax cut been enacted, however, inflation would have pushed taxpayers into higher tax brackets and increased the total yield of the individual income tax by roughly $57 billion over the same period, so about 30 percent of the tax cut can be viewed as an offset for anticipated inflation-induced tax increases.[18] Over fiscal years 1982-1985, the combination of bracket

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Security Administration, Office of Research and Statistics Studies in Income Distribution (June 1978), p. 7.)

16 Congressional Budget Office, Indexing the Individual Income Tax for Inflation (September 1980), p. 17.

17 Congressional Budget Office, Reducing the Deficit: Spending and Revenue Options (February 1983), p. 238. The Economic Recovery Tax Act included reductions in income tax withholding rates of 5 percent in October 1981, 10 percent in July 1982, and 10 percent in July 1983. The cumulative rate reduction is 23 percent because of compounding (1 - 0.95 x 0.90 x 0.90) = 0.23).

18 The extent to which the tax cut can be thought of in this way depends greatly, of course, on future inflation rates and on the benchmark date from which the measurement is made. The result is particularly sensitive to the assumptions made about future inflation rates. In February 1982, CBO estimated that, without enactment of ERTA, bracket creep would have increased individual income tax revenues by $85 billion in fiscal years 1982-1984. The comparable figure of $57

creep and legislated increases in Social Security taxes will offset roughly half of the ERTA tax rate cuts.[19]

Considering only the marginal tax rate cuts and not the inflation-induced increase in taxes between 1981 and 1984, the rate reductions in ERTA would cause all individual income taxes in 1984 to be about 23 percent lower than they would have been without the tax cut. Comparing 1984 tax liability under ERTA to tax liability in 1981 under prior law, however, the reduction in real taxes paid will be 13.9 percent for families at twice the median income, 13.5 percent for those at the median income, and only 2.9 percent for those at half the median income. These lower figures reflect anticipated inflation-induced increases in taxes as well as the ERTA rate cuts. They also indicate that lower-income families will be hurt disproportionately by the failure of ERTA to increase the personal exemption and zero bracket amount and by the narrow widths of the tax brackets at low income levels. Real after-tax income in 1984 under ERTA will be greater than after-tax income in 1981 under prior law by 3.3 percent for families with twice the median income, 1.8 percent for those with median income, and 0.2 percent for those with half the median income.[20]

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billion cited in the text was calculated in February 1983 by CBO using the same technique, but is based on the lower inflation rates then being projected. The February 1982 estimate was based on annual increases in the CPI of 7.5 percent for calendar year 1982, 6.9 percent for calendar year 1983, and 6.9 percent for calendar year 1984, while the February 1983 estimate was based on increases of 6.1 percent for calendar year 1982, 4.5 percent for calendar year 1983, and 5.0 percent for calendar year 1984. (Congressional Budget Office, Baseline Budget Projections for Fiscal Years 1983-1987 (February 1982), pp. 6 and 32; and Baseline Budget Projections for Fiscal Years 1984-1988 (February 1983), p. 6.)

19 CBO estimates that over fiscal years 1982-1985 the tax rate reductions and indexing provisions of ERTA will reduce revenues by $287.8 billion; bracket creep that would have occurred over that period, had ERTA not been enacted, would have increased revenues by $103.9 billion; and the increase in employee contributions to Social Security will raise revenues by $23.5 billion. The Social Security tax increases exclude increases in the employer portion of the payroll tax, which will be about the same size as increases in the employee portion.

20 Tax liabilities are measured in 1981 dollars, and only the ERTA tax rate cuts are taken into account. Projections of income growth and inflation rates are Administration estimates reported in the 1983 budget. (Charles R. Hulten and June A. O'Neill, "Tax Policy," in John L. Palmer and Isabel V. Sawhill, eds., The Reagan Experiment, p. 117.)

CHAPTER III. EVALUATING TAXES AND SHORTCOMINGS OF THE CURRENT INCOME TAX SYSTEM

EVALUATING TAXES

Criteria. The income tax and proposals for change are evaluated in the following chapters according to three standard criteria: simplicity, efficiency, and equity.[1] The simplicity of a tax is gauged by how well taxpayers understand it and how easily they can comply with its provisions, as well as how easily the IRS can administer it. The efficiency of a tax is determined by the degree to which it distorts the allocation of resources and reduces national output in comparison to a lump-sum or head tax that all citizens must pay in a fixed amount and that cannot, therefore, influence behavior. Analysis of a tax on efficiency grounds centers around the tax's effects on work, saving, and the allocation of capital among investments. The equity of a tax is usually judged by two standards: whether the tax falls equally on taxpayers of like economic status (called horizontal equity) and whether the tax appropriately distinguishes between taxpayers of different economic status (called vertical equity).

The goals of simplicity, efficiency, and equity are often in conflict, and the current income tax reflects the tradeoffs that have been made among the three.[2]

Ideal Tax. The theoretically ideal income tax would tax individuals uniformly on all income, whatever the source, including wages and salaries, in-kind compensation, and the real increase in the net worth of all investments. The Internal Revenue Code generally follows this approach of measuring income according to its sources. (Economists usually take the alternative approach of defining income according to its uses, that is, as the increase in an individual's potential command over goods and services during the year. Income is therefore the sum of consumption and change in

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1 For good explanations of these criteria, see Statement of John Chapoton, Assistant Secretary of the Treasury for Tax Policy, before the Senate Finance Committee (September 28, 1982), pp. 6-10; and Joint Committee on Taxation, "Analysis of Proposals Related to Broadening the Base and Lowering the Rates of the Income Tax" (September 24, 1982), pp. 3-7.

2 See Joint Committee on Taxation, pp. 3-7.

net worth.)[3] Partly because of the difficult valuation and practical administrative problems of adhering to the ideal, the current income tax deviates from it in many respects. It also deviates from it in other ways because the tax is used to encourage certain activities, such as saving for retirement or conserving energy, and to aid taxpayers in certain circumstances.

The remainder of this chapter discusses some of the shortcomings of the current tax and important ways in which it deviates from a theoretically ideal income tax. Some of these imperfections in the current tax would be eliminated or alleviated if tax were imposed on consumption rather than income, if the income tax were indexed completely for inflation, or if the income tax base were broadened and rates reduced. When this is the case, it is noted in this chapter and discussed in more detail in the following chapters.

SHORTCOMINGS OF THE CURRENT TAX SYSTEM

Light Taxation of In-Kind Income

Much income is received in kind and must be assigned a monetary value in order to be taxed. This includes fringe benefits, nonmonetary transfer payments such as rent subsidies and subsidized medical care, income received through barter and from home production, and consumer durables. The difficulty of imputing the appropriate monetary values to this income has resulted in its being taxed less heavily than other income or not taxed at all. As a result, taxpayers strive to receive more of their income in kind than they would if taxed equally on all income, and horizontal equity is violated because families with equal incomes are taxed at different rates, depending on the mix of their monetary and in-kind income.

The free or reduced-rate standby flights that airlines offer their employees as a fringe benefit are a good example of in-kind income that is difficult to value.[4] Such a flight might be valued at the additional cost to

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3 For an elaboration of this Schanz-Haig-Simons definition of income, see Treasury Department, Blueprints for Basic Tax Reform (January 17, 1977), pp. 26-38; and Richard Goode, "The Economic Definition of Income," in Joseph Pechman, ed., Comprehensive Income Taxation (Washington, D.C.: The Brookings Institution, 1977), pp. 1-32.

4 This example is from Joint Committee on Taxation, "Analysis of Proposals," p. 23.

the airline of providing the seat, which is practically zero, or the cost of a full-fare ticket, or even the flight's subjective value to the employee. Another example of in-kind income is that received through barter. A carpenter who repairs a dentist's house in exchange for an hour of dental work in effect earns the money that it would cost to buy the dental work and should be taxed on that income.

Most proposals to broaden the income tax base would tax more in-kind income than currently is taxed, but full taxation is not practically feasible. It would be possible to come closer to full taxation of some in-kind income, for instance, by disallowing corporate tax deductions for fringe benefit expenditures. Similar valuation problems would arise under a consumption tax since some consumption is attained without the exchange of money.

Consumer Durables. Consumer durables, such as owner-occupied housing, automobiles, and appliances, receive preferential tax treatment because the income that they produce is received in kind and therefore is not taxed, although some of the associated expenses (property tax and mortgage and consumer interest) are deductible.[5]

Consumer durables are investments that yield returns over many years, just as stocks and bonds do, but in the case of consumer durables the returns are nonmonetary. The annual return to owner-occupied housing, for instance, is the amount of rent that the owners would have to pay to live in their houses if they did not own them.[6] In theory, the income

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5 The concepts discussed in this section are extremely complex. For a more complete explanation, see Congressional Budget Office, The Tax Treatment of Homeownership (September 1981), pp. 18-20. Opinion differs as to whether interest payments on consumer debt should be deductible, but most theorists agree that under an income tax all real interest payments should be deductible and that the imputed income from nonfinancial assets should be taxed. Certain assets, such as antiques and collectibles, are neither pure investments nor consumer durables. In theory, their income tax treatment should be the same as that of consumer durables.

6 To see why the rental value of consumer durables should be treated as income, consider two individuals who each have $50,000 to invest. The first purchases a $50,000 bond yielding $5,000 (10 percent) annually and rents a house for $5,000 per year. The second spends $50,000 to purchase rather than rent an identical house. Since the two are financially in the same position, each should be taxed on $5,000 annual income.

produced by consumer durables, net of the associated expenses of depreciation, property taxes, mortgage or consumer loan interest, insurance, and maintenance, should be taxed. In order for the income to be taxed, however, monetary returns must be imputed. Theoretically, for instance, the owner of a television set should be taxed annually on the rental value of the set, but allowed to deduct depreciation, maintenance expenses, and interest paid on borrowings used to purchase the set.

Net imputed income from consumer durables has never been taxed in the United States, partly because few noneconomists have accepted the idea that it constitutes income and partly because of the practical difficulty of imputing rental values each year in the absence of market transactions. The tax exemption of the imputed income of consumer durables has probably not been a serious problem except in the case of owner-occupied housing, whose tax advantage has diverted investment funds away from plant and equipment.[7]

Some proposals for broadening the income tax base attempt to correct partly for the tax exemption of income from consumer durables by repealing the deductions for property taxes and mortgage and consumer interest. Under a consumption tax, the ideal tax treatment of consumer durables can be approximated, as explained in Chapter VI.

Unrealized Income

Net worth increases whenever assets appreciate, whether or not they are sold, and these increases constitute income that should, in theory, be taxed to the owners. But it is extremely difficult to impose taxes on paper gains and claims to income that will be received in the future.

Capital gains are currently not taxed until realized upon sale. Similarly, even though a vested employee's net worth increases when his company's defined contribution pension fund appreciates (since the employ-

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7 See, for example, Frank deLeeuw and Larry Ozanne, "Housing," in Henry Aaron and Joseph Pechman, eds., How Taxes Affect Economic Behavior (The Brookings Institution, 1981), pp. 283-326. By liberalizing depreciation deductions for plant and equipment, the Economic Recovery Tax Act of 1981 might have given many investments the same tax exemption afforded owner-occupied housing. See, for example, Patric Hendershott and James Shilling, "The Impacts on Capital Allocation of Some Aspects of the Economic Recovery Tax Act of 1981," National Bureau of Economic Research (December 1981).

ee can then expect to receive a larger pension), pension income is not taxed until received in retirement. In both cases, the associated deferral of tax liability effectively reduces the tax due on the income, because taxpayers can earn interest on the tax between the time when the income is earned and the time when the tax is due.

As a practical matter, eliminating the tax advantage for unrealized income is complicated and costly under an income tax. In the case of capital gains, it would require annual valuation of all assets, some of which are not readily marketable.[8] In the case of pension income, it would require taxing income on the basis of an expectation of the amount that will be received in the future, when the actual amount received depends on the outcomes of many uncertain events, including how long the employee lives. Taxing on accrual could also pose liquidity problems, since it would require that tax be paid before income is in hand.

Since unrealized income does not constitute spent receipts, it would not be taxed under a consumption tax. Capital gains, pension income, and life insurance income would be taxed only when withdrawn for consumption and would, therefore, receive no advantage compared to realized capital gains under a consumption tax.

Effects of Inflation

Because capital income is often earned years after the associated costs of earning it are incurred, inflation tends to overstate capital income unless tax accounting converts income and expenses to dollars of the same purchasing power (called "indexing"). The current income tax does not require these conversions. As a result, the tax rate on real investment income varies with the inflation rate and with the type of investment--its capital intensity, type of financing, and whether assets are long- or short-lived. Horizontal equity is violated, because individuals with equal real incomes pay different amounts of tax, and economic efficiency is impaired, because the returns to different investments are taxed differently. Chapter V is devoted to the problems that inflation poses for an income tax and describes the tax-base indexing that would correct them.

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8 If an asset lost value during the year, its owner would be allowed a tax deduction for the loss. A stockholder might pay tax one year on a paper gain and then get a tax refund if his stock subsequently dropped in value before sale.

Under a consumption tax, tax is imposed only on investment proceeds withdrawn for spending. Since the withdrawal and spending occur in the same year, inflation poses no serious problems for a consumption tax.

Taxation of Married and Single People

Graduated-rate income or consumption taxes in which married couples are taxed as one unit cannot be marriage neutral.[9] In other words, upon marriage the tax liability of a couple would either increase or decrease. Marriage neutrality would be accomplished either by making the tax proportional rather than progressive or by taxing individuals rather than couples.[10] Generally, the less progressive the tax, the closer it comes to marriage neutrality. Most flat-rate income tax proposals come very close to marriage neutrality, and proposals for broadening the tax base and reducing tax rates can go far in that direction.

Taxing individuals rather than couples would add some complexity, since investment income and deductions would have to be allocated between spouses. Moreover, under a progressive tax imposed on individuals, different amounts of tax would be collected from married couples of equal incomes, depending on the way income was split between the spouses.

The two-earner deduction enacted in 1981 is a compromise. It reduced marriage penalties, but left some couples with sizable penalties, created or increased marriage bonuses for others, and added some complexity to the tax as well.

Lack of Integration of Corporate and Individual Income Taxes

Corporations are now taxed on their income under the corporate income tax. After-tax corporate income is either distributed as dividends and taxed to shareholders under the individual income tax (hence the "double taxation of dividends") or retained and reinvested. Retained earnings increase the value of stock and therefore generate capital gains on which shareholders pay income tax (at the lower capital gains rates) if

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9 For a more complete discussion of this issue, see Joint Committee on Taxation, "The Income Tax Treatment of Married Couples and Single Persons" (April 2, 1980).

10 Making individuals the unit of taxation does not ensure marriage neutrality if there are community property laws that assign each spouse's property jointly to husband and wife.

they sell their stock. By contrast, business income earned by partnerships and sole proprietorships is taxed only once, under the individual income tax as income to the owners.

The current tax treatment of business is often criticized because it taxes some corporate income very heavily (at rates up to 73 percent) and distorts business decisions.[11] Many economists argue that it discourages the corporate form of doing business, discourages corporations from distributing their earnings as dividends, and encourages firms to borrow rather than finance with equity. These problems could be solved by abolishing the coporate income tax and allocating corporate income directly to the shareholders, who are the true beneficiaries of the income. But this allocation process, called integration of the corporate and individual income taxes, is complicated to implement under a progressive income tax.[12] (The double taxation of dividends could be eliminated more easily, however, by allowing corporations to deduct dividends paid to shareholders or by giving shareholders a tax credit for the amount of pretax corporate income needed to pay their dividends.) A corporate income tax would be unnecessary under a consumption tax, as explained in Chapter VI, but some advocate retaining the corporate tax even then, just as others justify the corporate tax under the current tax system, as a tax on the privilege of doing business as a corporation with limited liability.

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11 Seventy-three percent is the combined corporate and individual tax rate paid on dividends distributed by corporations paying the top corporate tax rate of 46 percent to shareholders paying the top individual tax rate of 50 percent. Per dollar of corporate income, 46 cents is paid in corporate tax, and 50 percent of the 54 cents of dividends generated, 27 cents, is paid in individual income tax, for a total tax of 73 cents (46 + 27 = 73).

12 Integration would be easy to achieve if the corporate and individual taxes allowed no exemptions and shared the same single tax rate. Comprehensive reform of the corporate income tax would be just as controversial as a reform of the individual income tax. For an in-depth discussion of integration of the corporate and individual income taxes, see Alvin Warren, "The Relation and Integration of Individual and Corporate Income Taxes," Harvard Law Review (February 1981), pp. 719-800; and Charles McLure, Jr., Must Corporate Income Be Taxed Twice? (The Brookings Institution, 1979).

Uneven Taxation of Income from Capital

Although some capital income is taxed very heavily because it is not indexed for inflation and because it is taxed under both the corporate and individual income taxes, much capital income is effectively untaxed or lightly taxed, through noncompliance or tax expenditures for saving and investment.[13] The average tax rate on real capital income is low. In 1979, for example, only about 30 percent of net real capital income was reported on individual tax returns, and corporate and individual income taxes together totaled about 28 percent of the nation's net real capital income.[14]

The tax expenditures for capital income are listed in Table 5. They include the tax exemption of interest on municipal bonds and Individual Retirement Accounts, the exclusion of 60 percent of nominal capital gains, and the provisions allowing businesses to depreciate plant and equipment faster than they lose real value. These tax preferences exist for a variety of reasons, including to encourage saving and investment generally, to encourage investment in particular activities, to offset the effects of inflation, to make the tax simpler than the theoretically ideal tax, and to compensate for distortions caused by other tax provisions.

Other Problems

Some other fundamental structural issues are difficult to resolve, whether tax is imposed on income or consumption.[15] For the most part, these are not discussed in the following chapters, unless the option being

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13 Compliance is worse for capital income than for labor income, probably because of the fairly comprehensive withholding of tax required of labor income.

14 Eugene Steuerle, "Is Income from Capital Subject to Individual Income Taxation?" Public Finance Quarterly (July 1982), pp. 290, 292. Steuerle only approximates the effective tax rate on income earned in 1979, since he compares taxes paid in 1979 to income earned in 1979, although tax paid in 1979 was owed partly on income accrued earlier, and some tax will be collected in later years on income earned in 1979.

15 In addition to the questions listed below, questions arise as to the proper way to tax life insurance, trusts, alimony, child support, prizes, Social Security benefits, transfer payments, and educational expenses. Blueprints for Basic Tax Reform discusses most of these issues.

discussed would alleviate or worsen the problem. Some of these questions are:

- What critieria should be used to determine whether a person is a dependent, and to whom should the income or consumption of dependents be taxed?

- How should an income or consumption tax treat the income that foreigners earn in the United States and the income that Americans earn outside the United States?

- Regardless of whether the tax base is income or consumption, should deductions be allowed for mostly nondiscretionary expenditures, such as state and local taxes and medical expenses?

- Should gifts and inheritances be treated as income of the recipients and taxed under a standard consumption or income tax, or should they be taxed separately or not at all?

- Should charitable contributions and other gifts be tax deductible?

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TABLE 5. TAX EXPENDITURES FOR SAVING AND INVESTMENT BY INDIVIDUALS IN FISCAL YEAR 1983[a] (In millions of dollars)

Tax Expenditure	Estimated Revenue Loss for Fiscal Year 1983
Exclusion of Interest on State and Local Bonds	5,655
Exclusion of Capital Gains at Death	3,975
Capital Gains Exclusion and Tax-Free Rollover of Personal Residences	5,025
Exclusion of Capital Gains Other than Gains on Personal Residences	15,650
Deductibility of Nonmortgage Interest in Excess of Investment Income and Interest on Home Mortgages	32,800
Net Exclusion of Pension Contributions and Earnings	50,765
Exclusion of Interest on Life Insurance Savings	4,805
Exclusion of Other Employee Benefits: Premiums on Group Term Life Insurance	2,100
Individual Retirement Plans	2,695
Exclusion of Interest on Certain Savings Certificates	2,355
Dividend Exclusion	445
Deferral of Interest on United States Savings Bonds	50
Credit for Increasing Research Activities	30
Special Provisions for Accelerated Depreciation on Equipment, Rental Housing, and Buildings Other than Rental Housing	1,740
Investment Credit	3,390
Expensing of Capital Outlays: Agriculture, Research, Exploration, and Development of Fuels and Nonfuel Minerals	1,455
Excess of Percentage Over Cost Depletion of Fuels and Nonfuel Minerals	1,450
Tax Incentives for Preservation of Historic Structures	130
Five-Year Amortization for Housing Rehabilitation	30
Reinvestment of Dividends in Stock of Public Utilities	365
Amortization of Motor Carrier Operating Rights	5
Amortization of Business Start-Up Costs	105

SOURCE: Update of list appearing in Eugene Steuerle, "Is Income from Capital Subject to Individual Income Taxation?" Public Finance Quarterly (July 1982), p. 297. Updated tax expenditure amounts are from Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 1983-1988 (March 1983).

a. Excludes corporate tax expenditures.

CHAPTER IV. INCOME TAX BASE BROADENING AND RATE REDUCTION

INTRODUCTION

If tax preferences were eliminated, income tax rates could be reduced without changing the yield of the tax. This approach is called broadening the tax base and reducing tax rates. This chapter evaluates large-scale base broadening--repeal of all or nearly all tax deductions, credits, exclusions, and exemptions--coupled with substantial marginal tax rate reduction. Under a truly comprehensive income tax, all personal deductions would be disallowed, including, among others, those for charitable contributions, medical expenses, state and local taxes, and casualty losses.[1] Interest on state and local bonds would be taxed, as would transfer payments, disability payments, workers' compensation, and fringe benefits. Real capital gains would be taxed in full, and most tax credits would be eliminated, including, for example, those for political contributions and home insulation. Costs of earning income would continue to be deductible, however, to ensure that the tax is on true net income rather than on gross receipts.

In addition to structuring a comprehensive income tax, several proposals call for flat-rate income taxes rather than graduated taxes. In these cases, the rate reduction accompanying base broadening would impose only one flat tax rate, so that all taxpayers would pay the same marginal rate on increments to income. Because most proposals for flat-rate taxes preserve a personal exemption, average tax rates would rise with income, however, so that the taxes would not be strictly proportional.

For example, suppose a flat-rate tax of 20 percent applied to all income above $3,000. As shown in Table 6, the marginal tax rate would be

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1 See U.S. Department of the Treasury, Blueprints for Basic Tax Reform (January 17, 1977), for a good discussion of both the ideal and practically feasible tax treatments of each individual base broadener. Many individual base broadeners are discussed also in Joseph Pechman, ed., Comprehensive Income Taxation (Washington, D.C.: The Brookings Institution, 1977); and Special Committee on Simplification, Section of Taxation, American Bar Association, "Evaluation of the Proposed Model Comprehensive Income Tax," Tax Lawyer (1979), pp. 563-686.

TABLE 6. AVERAGE AND MARGINAL TAX RATES FOR A FLAT-RATE TAX OF 20 PERCENT ON INCOME ABOVE $3,000[a]

Income (In Dollars)	Average Tax Rate (In percents)	Marginal Tax Rate (In percents)
3,000	0.0	20.0
4,000	5.0	20.0
6,000	10.0	20.0
8,000	12.5	20.0
12,000	15.0	20.0
20,000	17.0	20.0
40,000	18.5	20.0
60,000	19.0	20.0
150,000	19.6	20.0
300,000	19.8	20.0
1,000,000	19.9	20.0
2,000,000	20.0	20.0

a. This illustrative tax cannot be compared directly to the current tax because the two taxes do not yield the same revenue. The current tax is much more progressive than the tax in this example, with marginal rates from 11 to 50 percent.

20 percent for taxpayers of all incomes, but average tax rates would rise sharply for incomes just over the exempt amount of $3,000 and then level off and approach 20 percent as income increased.

Other pending proposals for broadening the income tax base would reduce tax rates but preserve more progressivity by leaving in place a graduated marginal rate structure. They would collapse the current twelve tax brackets to only three or four, whereas a flat-rate tax would collapse them to one bracket.

Liberals and conservatives alike have long supported the idea of broadening the income tax base and reducing rates. Joseph Pechman suggested this approach about 30 years ago.[2] Milton Friedman endorsed a broad-based, flat-rate income tax as early as 1962.[3] William Simon, former Secretary of the Treasury, announced his support for the concept in a speech in December 1975.[4] In 1976, the Brookings Institution sponsored a conference to explore broadening the income tax base and reducing tax rates.[5] During the Ford Administration, the Treasury Department released a study of two major options for reform of the income tax: conversion to the taxation of consumption rather than income and institution of a broadly based income tax with only a few graduated tax rates.[6]

Proposals to broaden the income tax base and reduce tax rates have recently attracted wide support. Many bills have been introduced in the Congress, and the Senate Finance Committee held hearings to investigate

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2 Joseph Pechman, "The Individual Income Tax Base," Proceedings of the 48th Annual Conference on Taxation sponsored by the National Tax Association, 1955.

3 Milton Friedman, Capitalism and Freedom (University of Chicago Press, 1962), p. 173.

4 Text of William Simon's December 3, 1975 speech at the Tax Foundation's national conference is reprinted in Daily Tax Report, Bureau of National Affairs, (12-4-75), pp. J-1 - J-3. Simon has more recently elaborated on his views in William Simon, Reforming the Income Tax System (Washington, D.C.: American Enterprise Institute, 1981).

5 Papers presented at the conference appear in Joseph Pechman, ed., Comprehensive Income Taxation, (The Brookings Institution, 1977).

6 U.S. Department of the Treasury, Blueprints for Basic Tax Reform (January 17, 1977).

the idea in September 1982.[7] President Reagan called the flat-rate tax "very tempting."[8] The Washington Post dubbed it "this year's phenomenon."[9]

In spite of such wide-ranging support and praise of base broadening and rate reduction on the part of many academics, much skepticism exists on a practical level.[10] Every special deduction, exemption, exclusion, and

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7 Members of Congress who have introduced bills in this Congress to reduce rates and broaden the tax base or to study the concept include: Senators DeConcini (S. 557), Quayle (S. 1040), and Bradley (S. 1421); and Representatives Hansen of Idaho (H.R. 170), P. Crane (H.R. 542), Paul (H.R. 1664 and H.R. 2137), Drier (H.R. 1770), Panetta (H.R. 2520), Hance (H.R. 2564), and Gephardt (H.R. 3271).

8 President Reagan called the flat-rate tax "very tempting" and "worth looking into." (New York Times, July 7, 1982, p. 1). Treasury Secretary Regan said, "a straight, across-the-board tax with no deductions may be the fairest tax of all." (New York Times, May 25, 1982, p. D6). OMB Director Stockman said, "I don't want to minimize the difficulty, but I would not be surprised if it (the flat-rate tax) was part of next year's budget." (Washington Post, June 22, 1982, p. A8). The flat-rate tax was not, however, submitted as part of the fiscal year 1984 budget.

9 Washington Post, July 4, 1982, p. F1. The Washington Post endorsed a flat rate of taxation on all income above an arbitrary threshhold of perhaps $10,000 per year. (Washington Post, April 15, 1982, p. A24). In June 1982, the Washington Post again endorsed "a flat low-rate tax," but in the same editorial said, "A well-off person is certainly able to share more of his last dollars with the government than a poor person, and a decent tax system will take account of that fact," and went on to support a negative income tax as the best way to make the tax progressive. (Washington Post, June 3, 1982, p. A19.) A year later the Washington Post spoke favorably of the Bradley-Gephardt bill that proposes a progressive, broad-based income tax (as described in Chapter VII). (Washington Post, June 9, 1983, p. A18.) The New York Times backed a broad-based income tax with graduated tax rates. (New York Times, June 6, 1982.)

10 William Fellner argued that not much would be gained by base broadening and that it would be nearly impossible to accomplish. (William Fellner, Problems to Keep in Mind When It Comes to Tax Reform (American Enterprise Institute, 1977).) Barber Conable, Jr.,

tax credit has a well-formed constituency, and many institutions, industries, and individuals feel dependent on these provisions for their continued financial well-being.[11] While most Americans favor a comprehensive income tax in theory, for instance, they do not approve eliminating the deductions necessary to make such a tax possible.[12]

The arguments for and against broadening the tax base are separable from the arguments for and against graduated and flat tax rates and are, therefore, discussed separately in this chapter. The chapter first reviews the merits of reducing tax rates generally and the pros and cons of a flat-rate tax versus a graduated-rate tax and then the merits of broadening the income tax base. It concludes with some generalizations that apply to all proposals (flat-rate and graduated-rate) to broaden the tax base, covering the problems that would remain, the difficulty of the transition to the new tax, and the likely distributions of hypothetical taxes by income group.

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ranking Republican on the Committee on Ways and Means, recently said, "You begin making exceptions to the exceptions, and pretty soon you're right back where you started." (Newsweek, July 19, 1982, p. 51). When asked what the chances are that a flat-tax proposal will be enacted, Milton Friedman responded, "Zero." (Fortune, July 26, 1982, p. 34.) John Nolan, a former Treasury Department official, said, "It's fun to talk about it (the flat-rate tax), but it would be impossible to implement." (Wall Street Journal, July 8, 1982, p. 1.)

11 See, for example, Thomas J. Reese, The Politics of Taxation (Westport, Conn.: Quorum Books, 1980), pp. 105-106.

12 In a Harris poll conducted in August 1982, 62 percent of the public backed a flat-rate tax with few deductions, but when asked about individual deductions, the same people overwhelmingly opposed their repeal. For instance, 80 percent favored retaining the deduction for medical expenses, 71 percent the deduction for home mortgage interest, 38 percent the credit for political contributions, and 34 percent the deduction for oil and gas drilling costs. (Business Week September 6, 1982, p. 15.) In a 1980 poll, 90 percent of the public responded that all of the interest paid on home mortgages should be deductible, and 69 percent that the costs of home insulation should be deductible. (Paul Harstad, "Interpreting Americans' Attitudes Toward Taxes," Tax Notes, November 9, 1981, p. 1091.)

MARGINAL RATE REDUCTION

Efficiency

Reducing tax rates substantially would have beneficial effects on economic efficiency, whether through a single, flat rate or a set of graduated rates. Lower marginal tax rates would probably induce additional work and saving, although no one knows by how much. Graduated income tax rates exact a cost in lost economic efficiency, since those in higher brackets work and save less. The extent of the efficiency loss is uncertain, however, as is the level of overall taxation and of rate progressivity at which the loss becomes serious.

Throughout this section, the theoretical arguments for and against graduated tax rates and the beneficial effects of lower marginal rates are discussed and quantified when possible. Broad-based, graduated-rate taxes can be designed to reduce marginal tax rates for most taxpayers. Most flat-rate tax proposals, however, would increase marginal tax rates by several percentage points for many low- and middle-income taxpayers, while they would decrease marginal tax rates substantially (from as high as 50 percent currently to around 20 percent) for high-income taxpayers. Therefore, in considering the overall effects of a flat-rate tax, the beneficial effects of reducing marginal tax rates for some taxpayers must be weighed against the effects of increasing them for others.

Labor Supply. Higher tax rates make work less attractive because more and more leisure must be given up to earn each additional dollar in take-home pay. On the other hand, higher taxes increase the amount of work needed to attain any given desired level of income. These two effects work in opposite directions, making it impossible to predict on theoretical grounds which will prevail.[13]

Although it has been known for some time that progressive taxes discourage married women from working outside the home, until recently,

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13 When marginal rate reduction is coupled with base broadening that preserves the total yield of the tax, individual taxpayers may incur tax cuts or increases, which complicate this analysis. The net effect of the rate reduction and base broadening would be to increase the work effort of those taxpayers whose tax burdens rose or stayed the same (since the rate reduction and loss in after-tax income would both work to increase work effort), but the net effect on the work effort of those whose taxes fell is indeterminate (since the increase in after-tax income may reduce work effort, while the rate reduction would increase it).

most evidence suggested that the tax system had little influence over the work decisions of prime-aged men.[14] A 1981 study contradicts these results and indicates that men would choose to work significantly more if the progressive tax were eliminated in favor of a broad-based, flat-rate tax, and that such a change would significantly improve the well-being of the labor force.[15] The new study compared the 1975 income tax (with marginal tax rates ranging from 14 to 50 percent on labor income) with prototype flat-rate taxes designed to raise roughly the same amount of revenue. Moving to a flat-rate tax of 14.6 percent with no exemption would increase married men's desired hours of work by about 10 percent, while a flat-rate tax of 20.7 percent with an exemption of $4,000 would increase desired hours of work by about 5 percent.[16] Unfortunately, the effects of a broad-based, graduated-rate income tax in increasing labor supply and improving well-being were not studied, so it is impossible to break down the beneficial effects of the broad-based, flat-rate tax into those resulting from the single tax rate and those from the rate reduction made possible through base broadening.[17]

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14 See, for instance, Richard Goode, The Individual Income Tax (The Brookings Institution, 1976), pp. 52-56; and Arthur Okun, Equality and Efficiency: The Big Tradeoff (The Brookings Institution, 1975), pp. 96-97). The tax system was believed not to influence the number of hours that men spend in the workforce, because most men have little choice but to work a forty-hour week. However, other work decisions that men make (like age of retirement, intensity of work effort, and level of schooling and other training) might be more sensitive to tax rates. (Harvey S. Rosen, "What is Labor Supply and Do Taxes Affect It?" American Economic Review (May 1980), pp. 171-176.)

15 Jerry Hausman, "Labor Supply," in Henry J. Aaron and Joseph A. Pechman, eds., How Taxes Affect Economic Behavior (The Brookings Institution, 1981), pp. 27-83. Goods and leisure are assumed to provide well-being according to a mathematical formula.

16 Ibid., pp. 63-64. Hausman also compares the "deadweight welfare losses" of the various taxes. (Deadweight loss is the amount of money that would have to be given a taxpayer along with a rebate of his taxes in order to make him consider himself as well off as if there were no tax.) Deadweight loss was about 29 percent of tax collected under the 1975 income tax but would drop to 14.5 percent of tax under a flat-rate tax of 20.7 percent with a $4,000 exemption and to 7 percent of tax under a flat-rate tax of 14.6 percent with no exemption.

17 The study determined, however, that the progressive 1975 income tax had a much greater effect in discouraging labor supply among high-

These results are preliminary, in that they have not been substantiated by other studies and are based on a model that does not account for all of the market adjustments, such as changes in wage rates, that would certainly follow from such major changes in the tax code. Moreover, although the results indicate large increases in desired hours of work, work schedules might not be flexible enough or the demand for certain skills strong enough, particularly over the near term, for such large increases to occur in practice.

In general, at lower tax rates, people would be more apt to seek employment remunerated in money and to pay the taxes that they owe on their income.[18] Tax-motivated barter of goods and services would lessen,

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income workers than among other taxpayers. Men who earned $10 an hour, for instance, desired to work about 12.8 percent less in 1975 than they would have in the absence of an income tax, while those who earned $6 an hour desired to work about 8.5 percent less, and those who earned $3 an hour desired to work about 4.5 percent less. Moreover, the 1975 tax imposed a substantially greater deadweight welfare loss on high-wage taxpayers than on others. In addition to the amount paid in tax, those in the highest wage fifth suffered a deadweight welfare loss of about $1,000 per year from the 1975 tax, compared to about $360 for those in the middle fifth and $80 for those in the lowest fifth.

Under the flat-rate taxes considered in the study, the effective marginal tax rates of the lowest-income taxpayers actually fell, those of middle-income taxpayers remained the same or rose by several percentage points, and those of the highest-income taxpayers dropped to 15-21 percent from rates as high as 50 percent. The welfare of all income groups increased, with the biggest increases occurring for those with the highest incomes. (Jerry Hausman, "Labor Supply," pp. 61-64; and "Income and Payroll Tax Policy and Labor Supply" in Lawrence Meyer, ed., The Supply-Side Effects of Economic Policy (May 1981), p. 192.)

18 At lower tax rates, the odds are changed in the "tax lottery." The payoff from successful tax evasion--tax saved--is lower. Unless the probability of being caught or the penalty imposed on those who are caught is also reduced, people will evade less tax, although no one knows how much less.

for instance. In addition, people would be more likely to spend their time on activities in which they have an economic comparative advantage.[19]

At low tax rates, workers would also demand more cash and fewer fringe benefits, and employers would spend somewhat less on deductible business expenses for company cars, travel, and entertainment that may serve partly as tax-free income for employees.[20] The marked rise in fringe benefits as a percent of payroll (from 18.7 percent of payroll in 1951 to 37.1 percent in 1980) may have been partly caused by the increases in marginal tax rates faced by many employees during that period.[21] A recent study suggested that a cut in marginal tax rates of 10 percent would decrease the percentage of compensation made up of fringe benefits by 2.2 percent.[22] (Taxing all fringe benefits would diminish their attractiveness and use even more.)

Saving and Investment. It is impossible to predict theoretically whether personal saving would increase or decrease if marginal tax rates were reduced. On the one hand, all taxpayers might be inclined to save more, because each dollar saved would earn more future consumption than

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19 A drop in marginal tax rates makes labor more mobile. In order for a move to a higher-paying job to be worthwhile, the additional after-tax income of the higher-paying job has to exceed the cost of the move. A reduction in marginal tax rate increases the pay differential and so can make worthwhile a move that otherwise would not pay. It thereby increases the mobility of the labor force.

20 Based on historical data and a model of firm behavior, one study predicted that a reduction in the top marginal tax rate from 70 to 50 percent like that enacted in 1981 would cause proprietors to reduce spending on entertainment by about 5 percent, on travel by about 2 percent, and on gifts by about 7 percent. (Charles Clotfelter, Business Perks and Tax-Induced Distortions: The Case of Travel and Entertainment (Duke University, March 1982), p. 18a.)

21 Some of the increases in fringe benefits have been mandated by law. Legally required fringe benefits--FICA taxes and contributions to unemployment and workers' compensation--made up 3.5 percent of payroll in 1951 and 8.9 percent in 1980. These and the statistics in the text are from U.S. Chamber of Commerce, Employee Benefits Historical Data 1951-1979 (1981), p. 11, and Employee Benefits (1980), p. 8.

22 James Long and Frank Scott, "The Income Tax and Nonwage Compensation," Review of Economics and Statistics (May 1982), p. 215.

before the tax cut. On the other hand, taxpayers might be inclined to save less, since they would need to save less in order to meet any particular desired level of future consumption.[23] Although the empirical work needed to resolve this theoretical ambiguity is highly controversial, the consensus today is that a reduction in marginal tax rates induces only a modest increase in personal saving, if any.[24] According to the study that found the largest positive saving response, a 25 percent cut in marginal tax rates (slightly more than the 23 percent cut enacted in the 1981 Economic Recovery Tax Act) would be expected to raise the saving rate from about 3.9 percent of GNP annually in 1976-1980 to between 4.1 and 4.2 percent annually.[25]

High marginal tax rates magnify the income tax's influence over investment decisions. Even if high marginal tax rates did not lead to a decline in overall national saving, they might cause a reallocation of saving away from heavily taxed investments into less heavily taxed or tax-free investments. The higher the marginal tax rate, the more it pays for taxpayers to spend time and money to seek out tax-sheltered investments. In addition to the wasted financial and legal resources, national output suffers because investment dollars do not flow to their most productive use.[26] Moreover, the higher the marginal tax rate, the more the tax

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23 Analysis of the effects of marginal rate reduction coupled with base broadening is more complicated. Elimination of tax preferences for saving would increase the marginal tax rate on some forms of saving. Moreover, those taxpayers whose tax burdens increased might save more in an attempt to recoup the loss in after-tax income.

24 Two recent studies that explored the responsiveness of saving to the after-tax interest rate are Michael Boskin, "Taxation, Saving, and the Rate of Interest," Journal of Political Economy (April 1978), Pt. 2, pp. S3-S27; and E. Philip Howrey and Saul Hymans, "The Measurement and Determination of Loanable-Funds Saving," in Joseph Pechman, ed., What Should Be Taxed: Income or Expenditure? (The Brookings Institution, 1980), pp. 1-48.

25 Herbert Stein and Murray Foss, "Taxes and Saving," The AEI Economist (July 1981), p. 6. This article also provides a good, nontechnical summary of the evidence concerning the link between marginal tax rates and saving.

26 In an effort to save taxes and earn the highest after-tax return, investors in the highest tax brackets invest in the most lightly taxed assets. This drives up before-tax returns on heavily taxed assets, making those assets attractive for tax-exempt and low-bracket inves-

deductibility of interest encourages borrowing for consumer loans and home mortgages.

The aggregate amount of individual saving is probably somewhat less under a progressive tax than a proportional tax of equal yield, because progressive taxes fall more heavily on high-income people, whose saving rates are on average relatively high.[27] For each dollar of tax paid, the amount that would have been saved had it not been taxed is greater for high-income than for low-income taxpayers. The net resultant reduction in national saving is probably not very large, however, and reduced national savings occurring as a result of a progressive tax can, in theory, be recouped through federal budget surpluses.[28]

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tors. Pretax rates of return on tax-exempt and partially taxed assets are thus driven down below what they would be were there no tax, and pretax rates of return on fully taxed assets are driven above what they would otherwise be. The concommitant overinvestment in tax-sheltered assets and underinvestment in other assets results in a loss in national output. (See Harvey Galper and Eric Toder, Transfer Elements in the Taxation of Income from Capital (Advisory Commission on Intergovernmental Relations and Department of Treasury, 1982); and Martin J. Bailey, "Progressivity and Investment Yields under U.S. Income Taxation," Journal of Political Economy (November/December 1974), pp. 1157-1175.)

27 Unfortunately, not much is known about the relationship between income and personal saving rates. The intuitive notion that savings rates increase with income was substantiated in the 1972-1973 Consumer Expenditure Survey. (U.S. Department of Labor, Consumer Expenditure Survey: Integrated Diary and Interview Survey Data, 1972-1973, Bulletin 1992 (1978), pp. 34-35.) Some part of the greater savings of higher-income people may be due to the high saving rates that one would expect of people whose incomes are uncharacteristically high only for a year or two. (See, for instance, Alan Blinder, "Distribution Effects and the Aggregate Consumption Function," Journal of Political Economy (June 1975), pp. 447-475.)

28 Goode estimated the cost in terms of decreased national saving of the progressive tax in effect in 1960-1961. Compared to the 25 percent of tax revenue that would have come from private saving under a proportional tax, the progressive income tax in place in that year drew 30 percent of tax revenue from private saving. (Goode, The Individual Income Tax, p. 66.)

Progressive taxation is popularly believed to discourage investment in risky undertakings. Because a progressive tax lessens the expected return more for risky than for riskless investments, it makes risky investments relatively less attractive.[29] At the same time, however, the tax reduces incomes, motivating some taxpayers to undertake additional risk in an effort to recoup the loss. For some, the first effect dominates so that a progressive tax leads them to decrease the riskiness of their portfolios, while for others the second effect dominates with the opposite result. Because a proportional tax with full loss offsets would not affect the relative attractiveness of risky versus risk-free investments, it would not produce the first effect mentioned above. Imposition of a proportional tax, therefore, would produce only the second effect and cause all taxpayers to increase the riskiness of their portfolios in an attempt to recoup the income lost through taxation.[30] If only partial or no loss offsets were allowed, however, the effect of a proportional tax on the amount of risk taking would also be ambiguous.

Effects on the Entire Economy. A recent study compared the overall efficiency of a progressive income tax with marginal rates ranging from 23 to 43 percent with that of a proportional tax of equal yield. Its simplified model of the economy predicted that a switch from the progressive to proportional tax would have beneficial effects equivalent to an increase of about 6 percent of lifetime resources.[31] In other words, in order to make

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29 The loss from an unsuccessful investment reduces income which, under a progressive income tax, produces tax savings at a lower tax rate than the rate imposed on the gain from a successful investment.

30 Evsey Domar and Richard Musgrave, "Proportional Income Taxation and Risk Taking," Quarterly Journal of Economics (May 1944), p. 390.

31 This is larger than the gain of about 5 percent of lifetime resources of switching from a progressive income tax to a progressive consumption tax, but smaller than the gain of about 7 percent of switching from a progressive income tax to a proportional consumption tax. (Alan Auerbach, Laurence Kotlikoff, and Jonathan Skinner, "The Efficiency Gains from Dynamic Tax Reform," Harvard Institute of Economic Research, discussion paper #870 (December 1981), pp. 41-42.)

In this and other economic studies, welfare is measured by making assumptions about how much satisfaction an individual derives from different bundles of goods and leisure consumed over the course of his lifetime. All of the models require strong simplifying assumptions about tastes for such things as labor versus leisure and current consumption versus deferred consumption, about the amount of addi-

taxpayers as well off under the progressive income tax as under the proportional tax, the nation would have to increase its earning potential by 6 percent.

Simplicity and Ease of Administration

In some respects, a flat-rate tax would be simpler and easier to administer than a graduated-rate tax. Reducing the progressivity of a graduated-rate tax would also simplify the tax, but by less than changing to a flat-rate tax.

Tax Manipulation. Under a flat-rate tax, less time and effort would be spent arranging to have income taxed at lower tax rates--by realizing the income in years when a taxpayer is in a lower tax bracket himself or moving it to family members in low tax brackets. For instance, less income would be deferred until retirement and fewer income-producing assets would be transferred to children. Since most flat-rate taxes under consideration would provide an exemption of the first several thousand dollars of income and would not tax those with net losses, however, a somewhat limited opportunity would remain for this kind of tax manipulation. In addition, because taxpayers always benefit from postponing tax payment, since they can earn interest on the money during the interim, they would still seek to defer some tax.

A broad-based tax with tax rates less steeply graduated than the current rates would also lessen incentives to manipulate taxes, although not by as much as a flat-rate tax. Moreover, since most taxpayers do not engage in this kind of tax manipulation, some authorities have downplayed the contribution of a single tax rate in reducing tax manipulation.[32]

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tional work and saving that will result from reductions in taxes on work and saving, about opportunities available for and returns to working and investment, and about initial endowments of talents and wealth.

32 For instance, M. Bernard Aidinoff, Chairman of the American Bar Association's Section on Taxation, claims that most complexity is caused not by graduated tax rates but rather by the combination of high marginal tax rates and the many special provisions of the tax code that narrow the tax base. (Statement of M. Bernard Aidinoff, "Flat-Rate, Broad-Based Income Taxation," before the Senate Finance Committee (September 29, 1982) p.4.)

Income Averaging. Entertainers, athletes, recipients of capital gains, and other taxpayers whose incomes fluctuate widely can be penalized by income taxes with steeply graduated rates. Since their income is bunched in one or several years, it is taxed at higher rates than it would be if it were spread over a number of years. The current tax compensates imprecisely for this by allowing taxpayers to average their income and by taxing capital gains at preferential rates. Income averaging is complicated, however, and even with averaging, people whose income is bunched seek expensive means of deferring the income to have it taxed later at a lower rate. Under a flat-rate tax, the need for income averaging would not be compelling, since the bunching of income in one year would no longer have adverse tax consequences.[33] Eliminating income averaging would simplify the income tax for the 5.7 million taxpayers who elect the provision as well as for those who consider doing so but do not.[34]

Inflation Indexing. A flat-rate tax would do away with nearly all inflation-caused bracket creep. The personal exemption and other dollar-denominated provisions retained in the tax code would have to be adjusted periodically to avoid having their real values eroded by inflation, however, and the tax base would continue to be mismeasured during periods of inflation, unless it was explicitly indexed for inflation as described in Chapter V. The inflation-caused distortions of the taxation of interest income might be greatly reduced under a proportional income tax, however, as discussed also in Chapter V.

Marriage Neutrality. As discussed in Chapter III, graduated-rate income taxes that tax married couples as one unit cannot be marriage neutral. In other words, upon marriage the tax liability of a couple must either increase or decrease under such a system. In general, reductions in progressivity lessen marriage penalties and bonuses, and proportional taxes are marriage neutral. Even though a flat-rate tax would probably not be strictly proportional, it would greatly lessen marriage penalties and bo-

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33 The need for income averaging is alleviated by any reduction in the steepness of marginal tax rates. Some sort of special tax treatment of capital gains, with the attendant complexity, might be preserved even under a flat-rate tax. The arguments advanced in favor of the special tax treatment of capital gains are set forth in Chapter V.

34 The 5.7 million 1980 tax returns on which income averaging was used represent about 6 percent of the 93.9 million individual income tax returns filed that year. Internal Revenue Service, Statistics of Income -- 1980, "Individual Income Tax Returns," (U.S. Government Printing Office, 1982) Table 1.1, p. 36 and Table 3.1, p. 77.

nuses compared to current law, and allow the two-earner deduction enacted in 1981 to be repealed.[35]

Ease of Tax Collection. Under a flat-rate tax with no deductions, credits, or exclusions other than a personal exemption, most tax could be readily collected at the source of the income.[36] Employers could withhold accurately taxes on wages and salaries. Employers could also more easily withhold taxes on fringe benefits, which would not have to be allocated to particular employees. (Valuing fringe benefits would remain a problem, however.) Tax on interest and dividends could more accurately be withheld by the financial institutions and companies paying them. All the tax due by most taxpayers would thus be paid on their behalf by employers and financial institutions, and taxpayers would need only to file simple forms annually with the Internal Revenue Service for refund of their personal exemption amounts. Low-income workers might face hardship waiting until year-end for their refunds, however. Alleviating the problem by exempting them from withholding would introduce the same sort of complexity as the provisions for exempting those of low income from the withholding of interest and dividend income enacted in 1982.

Equity

Both a flat-rate tax with exemptions and a graduated-rate tax are progressive, in the sense that average rates of tax increase with income, but a graduated-rate tax is more progressive than a flat-rate tax with equal personal exemptions and of equal yield.[37] For centuries, philosophers and economists have tried to establish by logic and analysis whether a progressive or proportional tax is fairer. Unfortunately, as discussed below, although in theory criteria can be set forth for assessing the fairness of a tax, it is impossible to evaluate how well different taxes

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35 A flat-rate tax is marriage-neutral if the standard deduction for a married couple is twice that for singles. (For a mathematical proof, see Michael Lovell, "On Taxing Marriage," National Tax Journal (December 1982), pp. 507-510.)

36 Dan Soule and Clyde Bates, "A Progressive Income Tax With a Uniform Tax Rate," Nebraska Journal of Economics and Business (Spring 1976), pp. 19-32.

37 A flat-rate tax is most progressive for incomes about equal to the exempt amount and very nearly proportional for incomes far above the exempt amount, as shown by the example in the introduction to this chapter.

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measure up to these standards without knowing more than is humanly possible about the preferences of individual taxpayers. As a result, the decision as to which tax--graduated or flat-rate--is fairer must necessarily be subjective, based on whether and by how much one thinks the government ought to redistribute income in order to lessen economic inequality. As Henry Simons said:

> The case for drastic progression in taxation must be rested on the case against inequality—on the ethical or aesthetic judgment that the prevailing distribution of wealth and income reveals a degree (and/or kind) of inequality which is distinctly evil or unlovely.[38]

In what is probably the most exhaustive modern treatment of progressivity, Blum and Kalven evaluate each of the arguments advanced in favor of progressive taxation and reject them all, except the argument that progressive taxation can be used to lessen economic inequality and redistribute income. Their major arguments are summarized in Appendix A. They conclude that the case for a progressive income tax is "an uneasy one."[39] Blum's and Kalven's work has been criticized because the authors come out in favor of a flat-rate tax by default after rejecting progressivity, rather than by making a positive case for a flat-rate tax. As Tobin said:

> I do not see any obvious presumption in favor of proportional taxation. One could as well say that the burden of proof is on those who would depart from a quadratic schedule, or from the Revenue Act of 1975 . . . . I fail to see how the issue of progressivity is essentially different from the issue of equality.[40]

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38 Henry Simons, Personal Income Taxation (University of Chicago Press, 1938, Midway Reprint, 1980), pp. 18-19.

39 Walter Blum and Harry Kalven, Jr., The Uneasy Case for Progressive Taxation (University of Chicago Press, 1953).

40 James Tobin, "Considerations Regarding Taxation and Inequality," in Colin Campbell, ed. Income Redistribution (Washington, D.C.: American Enterprise Institute, 1977), p. 128.

Boris Bittker agreed: ". . . In short, the case for every tax base and every rate schedule is 'uneasy,' since interpersonal comparisons cannot be avoided."[41] (Author's emphasis.)

Although economic theory cannot determine absolutely or objectively whether proportional or progressive income taxation is superior, this issue can be decided by a democratic government whose role is to resolve the inherently conflicting preferences of its citizens with respect to a whole range of issues. The people's elected representatives can thus decide on the appropriate degree of progressivity depending on their subjective evaluations. In the same way, they can decide on the appropriate degree to which government spending should redistribute income.

The public's assessment of the fairness of progressive taxation is not immutable. In a 1981 poll, for instance, 58 percent of the public declared that progressive income taxes are fair and equitable, whereas only 47 percent gave that response in 1982.[42]

Regressivity of Other Taxes. Progressivity in the individual income tax can be defended as a way to counteract the regressivity of other taxes, such as the Social Security tax, even if a proportional rather than progressive overall tax system is desired. Although the individual income tax is currently progressive, the regressivity of most other federal, state, and local taxes balances this out, leaving the entire system of U.S. taxes only slightly progressive.[43] Since much government spending is redistributive in

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41 Charles Galvin and Boris Bittker, The Income Tax: How Progressive Should It Be? (American Enterprise Institute, 1969), p. 37.

42 In 1982, 45 percent of the public felt that progressive taxes are not fair and equitable, compared to 38 percent who gave that response in 1981. (Testimony of Louis Harris before the Senate Finance Committee (September 29, 1982), p. 7.)

43 Under one particular index of progressivity in which a measure of +1 is achieved only by the most progressive tax (one in which those with the highest incomes pay all of the tax), a measure of 0 by a proportional tax and a measure of -1 by the most regressive tax, the individual income tax measured .19 in 1970, compared to .32 for the corporate income tax, -.15 for sales and excise taxes, and .07 for all taxes combined. (Daniel Suits, "Measurement of Tax Progressivity," American Economic Review (September 1977), p. 750.) Suits' estimates are based on assumptions about the incidences of taxes put forth in Joseph Pechman and Benjamin Okner, Who Bears the Tax Burden? (The Brookings Institution, 1974).

nature, government spending and taxing taken together are redistributive and would be even if the income tax were proportional.[44]

Exploitation of a Minority. Progressive income taxation has been criticized by some because it allows the majority to impose confiscatory taxes on and exploit those with very high incomes.[45] The potential for exploitation of a minority by the majority is a more general problem of democratic government, rather than of progressive taxation alone, however, and applies to government spending as well as taxing.[46] Moreover, the temptation to impose confiscatory taxes on the very wealthy may be tempered by the hope on the part of the average citizen that one day he will be wealthy himself.

BROADENING THE INCOME TAX BASE

Whether base broadening is accompanied by reduction in the tax rates to a flat-rate or graduated-rate structure, some general conclusions hold true and are discussed below. Arguments for and against tax base broadening are broken down into those of simplicity, efficiency, and equity.

Simplicity

Eliminating most personal deductions and tax credits would greatly simplify the tax code and tax returns. Taxpayers would no longer be required to keep extensive records of charitable contributions and medical expenses, for example, if those deductions were eliminated. On the other hand, taxing other items not now taxed would introduce added complexity. Taxing transfer payments, like AFDC, the cash value of food stamps, and all unemployment compensation, would bring more taxpayers into the system, increasing the administrative burden. Taxing fringe benefits and accrued life insurance earnings might pose difficult valuation problems. Taxing capital gains in full might be opposed unless the gains were indexed for inflation, and indexation would introduce added complexity. In addition, if tax subsidies were replaced by new direct government spending,

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44 Although the Social Security tax itself is regressive, for instance, Social Security taxes and benefits together are redistributive.

45 See, for example, Bruce Bartlett, "The Economics of Progressive Taxation," Modern Age (Summer 1978), pp. 288-289.

46 See Blum and Kalven, The Uneasy Case, p. 20; and Bittker, The Income Tax, p. 33.

the gains in tax simplification might be offset by the complexity of the new spending programs.

Economic Efficiency

Failing to tax all income equally causes a misallocation of resources, since certain forms of saving and certain investments are given favorable treatment. The special tax provisions for owner-occupied housing, for instance, have resulted in overinvestment in housing relative to plant and equipment.[47] The tax exemption of interest on state and local bonds gives state and local governments an advantage compared to private firms in the cost of providing goods and services.[48] The ability of taxpayers simultaneously to invest in tax-free assets and to borrow and deduct in full all interest paid creates an opportunity for many high-bracket individuals to profit at the Treasury's expense, through borrowing and lending that creates no net change in the taxpayers' financial positions but does involve a waste of resources.[49] Moreover, since most fringe benefits are not taxed, the mix of compensation is tilted too heavily toward fringe benefits relative to cash. Since employer-provided medical and life insurance are untaxed, for instance, the nation might be consuming too much medical care and life insurance.

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47 See, for example, Frank deLeeuw and Larry Ozanne, "Housing" in Henry Aaron and Joseph Pechman, eds., How Taxes Affect Economic Behavior (The Brookings Institution, 1981), pp. 283-326; and Congressional Budget Office, The Tax Treatment of Homeownership (1981), pp. 21-32.

48 This has been a problem, particularly in the last decade, as municipal bonds have been issued in increasing quantities to finance traditionally private-purpose goods and services, such as housing, private hospitals, and buildings and equipment for private firms of all sorts. See Congressional Budget Office, Small Issue Industrial Revenue Bonds (April 1981); Tax-Exempt Bonds for Single-Family Housing (April 1979); and Tax Subsidies for Medical Care (January 1980).

49 Although it is illegal to deduct interest on money borrowed to invest in tax-exempt bonds, this provision is hard to enforce since uses of borrowed funds are nearly impossible to trace. Since investment interest deductions are limited to $10,000 more than investment income, the ability to deduct interest payments on borrowed funds invested in tax-free assets is also limited.

Although economic efficiency would improve as a result of base broadening because current biases favoring certain kinds of investment would be eliminated, it could worsen because the repeal of tax preferences for saving would make saving less attractive.[50] Moreover, efficiency gains would be lost if tax subsidies were replaced by new direct spending programs subsidizing the same activities.

Equity

Under the current income tax, individuals with equal incomes pay markedly different rates of tax according to their willingness and ability to take advantage of deductions and credits or to receive their income from tax-free sources like fringe benefits, transfer payments, and interest on tax-exempt bonds.[51] Much of the current dissatisfaction with the income

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50 A recent study that attempted to take both factors into account concluded that the current income tax is more efficient overall than one with the base broadened somewhat and marginal tax rates reduced across the board to preserve the current yield of the individual income tax. The study did not compare the current tax to a completely comprehensive income tax, but to a tax with no preferences for saving and investment and with its base broadened to include all real capital gains and imputed income on owner-occupied housing. Integration of the corporation income tax with this broader-based individual income tax would require higher marginal tax rates to preserve the current combined yield of the corporation and individual income taxes. According to this study, such an integrated and broader-based income tax would about equal the current income tax on economic efficiency grounds. Unfortunately, the results of this study must be considered tentative, since they are based on very strong simplifying assumptions, as explained in footnote 31. (Don Fullerton, John Shoven, and John Whalley, "Replacing the U.S. Income Tax with a Progressive Consumption Tax: A Sequenced General Equilibrium Approach," National Bureau of Economic Research Working Paper No. 892 (May 1982), pp. 19, 21.)

51 Nearly all taxpayers who take deductions, credits, and exclusions do not gain dollar for dollar of tax reduction. Rather, they pay an implicit tax that leaves them better off by less than a dollar per dollar of tax reduction. For instance, suppose that an employee is offered a choice of a pay increase of $200 or dental insurance coverage which would also cost the employer $200. If the employee is in the 50 percent tax bracket, he would owe $100 tax on the pay increase (and no tax on the insurance coverage), so he would choose the dental

tax derives from the perceived violation of horizontal equity that arises from the wide variation in effective rates of tax within income groups.[52]

On the other hand, the Congress enacted many tax preferences specifically to account for differences among individuals in their financial status. For example, special provisions were enacted because it was felt that two taxpayers of equal income are not in equivalent positions if one has large and unavoidable medical expenses or if one is blind, elderly, or disabled. Eliminating the deductibility of medical expenses, the extra personal exemptions of the blind and elderly, or the exclusion of Social Security benefits and disability pay might therefore lessen perceived horizontal equity.[53]

Tax base broadening would also affect the fairness of the income tax by changing the distribution of the tax. Most people believe that wealthy taxpayers make disproportionately heavy use of deductions, exclusions, and

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coverage even if it was worth only $110 to him. Although he had saved $100 of tax, he would consider himself better off by only $10 (compared to having chosen the pay increase), so the implicit tax is $90. For further discussions of implicit taxes, see Department of Treasury, Blueprints for Basic Tax Reform, pp. 152-153; and Harvey Galper and Eric Toder, "Transfer Elements in the Taxation of Income from Capital" (1982).

52 For evidence on the wide dispersion in effective tax rates (not taking into account implicit taxes) see Benjamin Okner, "Distributional Aspects of Tax Reform During the Past Fifteen Years," National Tax Journal (March 1979), pp. 11-27.

Milton Friedman scorned the net result of a highly progressive statutory tax rate schedule coupled with a vast array of deductions and exclusions: "The effect has been to make the actual rates imposed far lower than the nominal rates and, perhaps more important, to make the incidence of the taxes capricious and unequal. People at the same economic level pay very different taxes depending on the accident of the source of their income and the opportunities they have to evade the tax." (Milton Friedman, Capitalism and Freedom (University of Chicago Press, 1962), pp. 172-173.)

53 Some argue that the elimination of these preferences would enable the substitution of large enough personal exemptions to ensure that the neediest would pay no tax; others argue that even large personal exemptions cannot differentiate among taxpayers' economic circumstances the way the current preferences do.

credits so that extensive base broadening would shift the burden of the tax more toward high-income taxpayers. Very high-income taxpayers do in fact derive almost all of the benefit from certain deductions and exclusions, such as the deduction for charitable contributions and the exclusions for capital gains and interest on municipal bonds. But other deductions and exclusions, such as the exclusions for transfer payments and Social Security benefits, benefit primarily lower-income taxpayers. When tax liabilities for the 1976 tax law were compared by income group with a fairly comprehensive tax base using the same 1976 rates, the tax liabilities of those with incomes below $15,000 increased by the greatest percentages--by between 91 and 323 percent. (These percentages represent small dollar amounts, since tax liabilities of these taxpayers were low.)[54] Tax liabilities of those with incomes between $15,000 and $50,000 increased by percentages varying between 66 and 74 percent, those with incomes between $50,000 and $500,000 by percentages of between 56 and 67 percent, and those with incomes above $500,000 by percentages of between 59 and 82 percent.[55]

Substitution of Spending for Tax Subsidies

Under the most comprehensive, broad-based income tax, subsidies would not be delivered through the tax code. If the Congress wanted to encourage people to buy state and local bonds, save for retirement, or install solar heaters or windmills, for instance, it would have to appropriate funds directly for those purposes. Subsidies delivered through spending programs are generally subject to closer budgetary scrutiny than those delivered through the tax code. Spending programs are reviewed more frequently than the tax code, and tax subsidies, like entitlements, are available to all who meet eligibility requirements, without any limit on aggregate use. Because of interactions among tax subsidies and with the

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54 Joseph Minarik, "The Yield of a Comprehensive Income Tax," in Joseph Pechman, ed., Comprehensive Income Taxation (1977), p. 285.

55 Ibid. Of the additional tax that would be collected from broadening the tax base but leaving rates unchanged, 18 percent would be paid by those with incomes below $15,000, 56 percent by those with incomes between $15,000 and $50,000, and 26 percent by those with incomes above $50,000. This compares to the distribution of total tax paid under 1976 tax law for the same income groups of 11, 59, and 30 percent, respectively.

standard deduction, it is often extremely difficult to determine the true cost of tax subsidies.[56]

If the Congress chose to eliminate all tax preferences in favor of a comprehensive income tax base, it would probably replace some eliminated preferences with direct spending. To the extent that this was done, the tax rate reduction that could be accomplished with base broadening would be lessened commensurately, unless other spending was curtailed or the budget deficit increased.

GENERAL CONCLUSIONS ABOUT BASE BROADENING AND RATE REDUCTION

Some Problems Would Remain

Although base broadening and rate reduction would greatly decrease distortions now imposed by the income tax, some difficult problems would remain. The theoretically ideal tax treatment of certain kinds of income is not practically feasible. In some cases, such as with capital gains and pension income, income is earned over a long period of time and should, in theory, be taxed as it accrues, but the difficulty and costliness of determining the amount of such income in the absence of monetary transactions would almost certainly prove insurmountable. Similarly, imputing dollar figures to the income from home production and owner-occupied housing and other consumer durables is probably not feasible (see Chapter III). As discussed above, a flat-rate tax would eliminate nearly all inflation-caused bracket creep, but it would not solve the mismeasurement of the income tax base that occurs because of inflation.

Business Taxation

Unless enactment of a broad-based individual income tax was accompanied by reform of the corporate income tax, the income tax overall would still exert a large role in business investment decisions. This would result from the combination of corporate tax preferences and the failure to integrate the corporate and individual income taxes. (For an explanation of integration, see Chapter III.)

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56 See Congressional Budget Office, Tax Expenditures: Current Issues and Five-Year Budget Projections for Fiscal Years 1982-1986 (September 1981), pp. 46-63.

Even if a comprehensive individual income tax were adopted and no personal income tax deductions were allowed, the legitimate costs of earning partnership and sole proprietorship income would be deductible under the individual income tax. There is no clear line separating legitimate business expenses from personal expenses, so abuses would continue as taxpayers deducted as business expenses the costs of such things as cars, vacations, and restaurant meals.[57] In addition, most so-called tax shelters, such as those for real estate and oil and gas, benefit individuals who organize limited partnerships and take advantage of lucrative business tax provisions, such as deductions that are more generous than the deductions that would be allowed for the true costs of earning income. Unless these business tax preferences were repealed, opportunities for tax shelters would remain, although, as mentioned above, tax shelters would be less lucrative at the lower tax rates made possible by base broadening.

As long as the tax rate on corporate income differed from that on individual income, taxpayers would reshuffle their affairs to some extent to have their income taxed at whichever rate was lower. Some of the bills for flat-rate individual income taxes would solve this problem, since they call for elimination of the individual taxation of dividends and for a reduction in the rate of tax on corporate income, so that all income--corporate and individual--would be taxed at the same flat rate.[58] Together these two changes would very nearly accomplish the integration of the two taxes.[59]

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57 The deductibility of certain expenses, such as those for restaurant meals and travel, could be limited by allowing only a percentage of the expense to be deducted, on the theory that a portion is actually an untaxed fringe benefit enjoyed by employees. Since any such rule would necessarily be arbitrary, its effect would be to disallow the deductibility of some expenses that are purely business related and to allow the deductibility of some personal expenses.

58 The Hall-Rabushka plan (S. 557), described in Chapter VII, would integrate the corporate and individual income taxes completely by eliminating taxes on capital gains and dividends and imposing the same flat tax rate on businesses and individuals.

59 Even these proposals do not accomplish complete integration, since individuals would still pay tax on retained corporate earnings that increased stock prices and thus created capital gains. Individuals with incomes so low that they would be exempt from the flat-rate

Difficult Transition

The transition to a broad-based individual income tax of any sort would be difficult. Even with phase-ins or grandfathering, a new tax system would bring with it large windfall losses in the values of many assets. Even if home mortgage interest deductions were phased out over several years, for instance, homeowners might still suffer an immediate drop in the value of their houses. There would, of course, be windfall gains in the value of assets that are taxed heavily under current law. In any case, if any windfall losses or gains proved too inequitable, the Congress could attempt to rectify the problems through further changes in the tax code, as discussed in Chapter VII.

Winners and Losers. Even if graduated tax rates were adopted so that each income group paid about the same average tax as under current law, a comprehensive income tax would leave many individuals paying lower taxes than they do now and others paying more. The winners would be those who currently make less use of tax deductions, exclusions, and credits than is average for their income group, and the losers would be the current heavy users of tax preferences.

Earlier in this chapter, results were cited from a study that estimated the tax increases that would result from broadening the base of the individual income tax in 1976 without changing the rates. The same study then estimated the differences in tax burdens that would result if the rates were reduced so as to hold revenues constant and preserve the overall progressivity of the tax. Moving from the 1976 income tax to such a hypothetical broad-based tax would have increased the taxes of about 30 million taxpayers, with the average increase being about $650. About 45 million taxpayers would have received tax decreases, with the average decrease being about $500.[60] Of those paying more taxes, roughly 23 million would have had increases greater than both $100 and 10 percent of their actual 1976 tax liability.[61] These figures are an upper bound for the

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individual income tax would be overtaxed on their corporate-source income under these proposals, unless the individuals were refunded the corporate tax paid on their behalf.

60 These numbers are the rough averages for changes to two different, but essentially similar in scope, comprehensive income tax bases. The actual differences between the two are small. (Minarik, "The Yield of a Comprehensive Income Tax", p. 290). A similar exercise with similar results was reported in Blueprints for Basic Tax Reform, pp. 162-167.

61 Minarik, "The Yield of a Comprehensive Income Tax," p. 292.

losses in net income that would be experienced from the change, however, because they assume no change in taxpayer behavior, even though under the new tax taxpayers would almost certainly spend their money with less thought to tax consequences and reduce costly efforts to lessen their taxes.[62] For example, an individual who currently pays $2 to a tax shelter syndicator in exchange for a $3 tax savings would not be worse off by $3 if the shelter were eliminated, but only by $1.

Hypothetical Broad-Based Tax System

A variety of approaches could be used to broaden the individual income tax base and, depending on the comprehensiveness, any number of flat-rate taxes could raise the same amount of revenue as the current tax. The lowest tax rate could be achieved by broadening the tax base as much as possible and eliminating the personal exemption and zero bracket amount (standard deduction).

Even assuming no behavioral changes on the part of taxpayers, it is difficult to determine precisely the single tax rate that would raise the equivalent of current revenues for any specified personal exemption and tax base. The Joint Committee on Taxation estimated that a flat tax rate of 11.8 percent would raise the same amount of revenue in 1984 as the current tax system if the tax base were expanded by taxing all nominal capital gains in full and eliminating all personal exemptions, tax credits, and personal deductions, including the standard deduction (zero bracket amount).[63] A much higher flat tax rate--about 18.5 percent--would be needed to raise this amount of tax without eliminating any deductions, exemptions, or credits or in any other way changing the current tax base.[64]

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62 See, for example, Milton Friedman, "How Flat is Flat?," Newsweek (August 2, 1982), p. 52.

63 This rate would raise the same amount of revenue as the current income tax would in 1984 if incomes were at 1981 levels. See Testimony of Joseph Minarik, Congressional Budget Office, before the Subcommittee on Monetary and Fiscal Policy, Joint Economic Committee (July 27, 1982), pp. 14-15.

64 See Minarik testimony of July 27, 1982. Another study examined flat-rate taxes with different tax rates and exemption levels to find the tax that preserved the 1982 tax yield while coming closest to the distribution of tax burdens in 1982. The tax that minimized the sum of changes in individual tax burdens had a marginal rate of 25 percent, allowed nonrefundable tax credits of $1,000 per return and $500 per

Distribution of the Tax by Income Group. The current individual income tax is progressive, with average tax rates projected for 1984 rising from about 5 percent for those with incomes from $5,000 to $10,000 to about 25 percent for those with incomes above $200,000.[65] No flat-rate

person, and did not allow any deductions. (Joel Slemrod and Shlomo Yitzhaki, "On Choosing a Flat-Rate Income Tax Schedule" (National Tax Journal, March 1983), pp. 42-43.)

65 The average tax rate for those with income below $5,000 is projected to be -1.4 percent, reflecting tax refunds received under the earned income credit. These statistics and those reported in the text are preliminary and are based on expanded income, which is adjusted gross income plus certain tax preference items and excluded capital gains. (Joint Committee on Taxation, "Analysis of Proposals Relating to Broadening the Base and Lowering the Rates of the Income Tax" (September 24, 1982), p. 16.) The Treasury Department recently projected average tax rates for 1984 using somewhat different concepts of income and tax. Allocating corporation income tax to shareholders and using a broader definition of income that includes the currently untaxed income that would be taxed under a comprehensive income tax, the Treasury Department projected average tax rates for 1984 ranging from 3 percent for those with incomes below $5,000 to 34 percent for those with incomes above $200,000. (Statement of John Chapoton, Assistant Secretary of the Treasury for Tax Policy before the Senate Finance Committee (September 28, 1982), p. 26.)

Although federal, state, and local taxes taken as a whole are roughly proportional, the individual income tax is itself progressive. (See Joseph Pechman and Benjamin Okner, Who Bears the Tax Burden (The Brookings Institution, 1974).) Recent work by Hausman, Galper, Toder, and Browning suggests that the individual income tax may be more progressive than previously believed. (See Hausman, op. cit.; Galper and Toder, op. cit.; and Jacquelene Browning, "Estimating the Welfare Cost of Tax Preferences," Public Finance Quarterly (April 1979), p. 212.)

Two summary statistical indexes have been devised recently to measure the overall progressivity of a tax such as the individual income tax, but they do not produce the same results in any given year and over some periods they move in opposite directions. (See John Formby, Terry Seaks, and W. James Smith, "A Comparison of Two New Measures of Tax Progressivity," Economic Journal (December 1981), pp. 1015-1019; Nanak Kakwani, "Measurement of Tax Progressivity: An International Comparison," Economic Journal (March 1976), pp. 71-80; and Daniel Suits, "Measurement of Tax Progressivity," American

tax system would replicate this degree of progressivity. Since the flat tax rate would probably be between 15 and 20 percent, those high-income taxpayers who now pay average rates far above those levels would get big tax cuts, and some of those currently paying less would incur sizable tax increases. Table 7 shows the distribution of the flat-rate income taxes just described, with rates ranging from 11.8 percent to 18.7 percent. The tax with the broadest base and no personal exemptions, zero bracket amount, tax credits, or personal deductions appears as System 1. Under this plan, taxpayers in the highest income group would pay roughly half the tax that they now pay, while those in the lowest income groups would pay considerably more tax than currently. Basically the same result would hold under System 2, with tax imposed at the flat rate of 18.5 percent on the current tax base, although taxes of the lowest income groups would not increase by as much as under the most broadly based flat rate tax of System 1.

In order to provide relief to taxpayers in the lowest income groups, most proposals for flat-rate taxes would provide personal exemptions and zero bracket amounts at least as large as those provided under current law. Systems 3 and 4 in Table 7 are designed to show the effects of allowing personal exemptions under the same broad-based tax as System 1. The personal exemptions and zero bracket amount of System 3 are those of current law: a $1,000 exemption and zero bracket amounts of $2,300 for single taxpayers and $3,400 for married couples. The larger allowances of System 4 are: a $1,500 personal exemption and zero bracket amounts of $3,000 for single taxpayers and $6,000 for married couples. Even with these more generous allowances, taxes would increase on average for those with incomes below $50,000 and decrease considerably for those with incomes above $50,000, with those with incomes above $200,000 receiving tax cuts of about $28,000 on average.

A broad-based tax with graduated rates could be devised to replicate the current degree of overall income tax progressivity, but within each income group many individuals would still get large tax cuts or increases, as discussed above. The Treasury Department estimated that the combined yield of the current individual and corporate income taxes would be replicated by a broad-based income tax with three rates--10 percent on the

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Economic Review (September 1977), pp. 747-752.) Indeed, some people even question the usefulness of distributional data based on annual income, on the basis that lifetime income is a superior measure of ability to pay. (See David Davies, "Measurement of Tax Progressivity: Comment," American Economic Review (March 1980), pp. 204-7; and Thomas Mayer, "The Distribution of the Tax Burden and Permanent Income," National Tax Journal (March 1974), pp. 141-146.)

TABLE 7. DISTRIBUTION OF TAX LIABILITIES UNDER ALTERNATIVE FLAT-RATE TAX SYSTEMS COMPARED TO 1984 TAX LAW[a] AT 1981 INCOME LEVELS

Expanded Income[b] (in thousands of dollars)	Number of Taxable Returns (in thousands)	Tax Liability 1984 Law (in millions of dollars)	System 1 (11.8 percent tax on adjusted gross income, with no personal exemption, zero bracket amount, tax credits, or personal deductions, and with long-term capital gains included in full) Tax Liability (in millions of dollars)	Change in Tax (in percents)	Change in Tax (dollars per return)
0 - 5[c]	6,482	403	5,479	1,259.5	783.07
5 - 10	15,057	5,772	14,280	147.4	565.04
10 - 15	13,092	12,526	19,700	57.3	547.99
15 - 20	10,737	17,462	22,496	28.8	468.88
20 - 30	16,800	44,080	49,701	12.8	334.58
30 - 50	13,568	63,833	60,579	-5.1	-239.82
50 - 100	3,580	38,687	27,389	-29.2	-3,155.74
100 - 200	631	18,656	9,872	-47.1	-13,920.58
200 and above	164	16,385	7,675	-53.2	-53,107.15
Total or Average	80,110	217,803	217,172	-0.3	-7.87

(Continued)

SOURCE: Joint Committee on Taxation, May 18, 1982.

a. To facilitate comparison, 1984 law in this table does not include the earned income credit, the two-earner married couple deduction, or the IRA or Keough provisions. The flat-rate tax systems similarly do not include those provisions.

TABLE 7. (Continued)

Expanded Income[b] (in thousands of dollars)	Number of Taxable Returns (in thousands)	Tax Liability 1984 Law (in millions of dollars)	System 2 (18.5 percent tax on 1984 taxable income less zero bracket amount) Tax Liability (in millions of dollars)	Change in Tax (in percents)	Change in Tax (dollars per return)
0 - 5	6,482	403	1,574	290.7	180.71
5 - 10	15,057	5,772	8,752	51.6	197.91
10 - 15	13,092	12,526	17,610	40.6	388.31
15 - 20	10,737	17,462	22,665	30.0	484.54
20 - 30	16,800	44,080	52,871	19.9	523.28
30 - 50	13,568	63,833	66,419	4.1	190.61
50 - 100	3,580	38,687	30,486	-21.2	-2,290.90
100 - 200	631	18,656	10,743	-42.4	-16,540.20
200 and above	164	16,385	7,129	-56.5	-56,438.05
Total or Average	80,110	217,803	218,249	0.2	5.57

(Continued)

b. Expanded income is a broader concept of taxpayer income than adjusted gross income. In addition to adjusted gross income, it includes the excluded part of capital gains, percentage depletion in excess of cost depletion, and other tax preferences subject to the minimum tax. At the same time, it excludes the deduction of investment interest to the extent it exceeds investment income. The differences between adjusted gross income and expanded income occurs mainly in the higher income classes.

TABLE 7. (Continued)

Expanded Income[b] (in thousands of dollars)	Number of Taxable Returns (in thousands)	Tax Liability 1984 Law (in millions of dollars)	System 3 (15.7 percent tax on 1984 law taxable income less zero bracket amount, with long-term capital gains included in full, and no itemized deductions) Tax Liability (in millions of dollars)	Change in Tax (in percents)	Change in Tax (dollars per return)
0 - 5[c]	6,482	403	2,232	453.7	282.10
5 - 10	15,057	5,772	7,854	36.1	138.26
10 - 15	13,092	12,526	15,720	25.5	243.97
15 - 20	10,737	17,462	20,778	19.0	308.88
20 - 30	16,800	44,080	49,978	13.4	351.06
30 - 50	13,568	63,833	66,466	4.1	194.08
50 - 100	3,580	38,687	32,658	-15.6	-1,684.20
100 - 200	631	18,656	12,459	-33.2	-9,821.59
200 and above	164	16,385	10,050	-38.7	-38,630.67
Total or Average	80,110	217,803	218,194	0.2	4.88

(Continued)

c. Outcomes under the flat-rate tax for tax returns of under $5,000 of income would be highly uncertain. Some taxpayers at that income level currently make use of tax preferences that would be terminated under the flat-rate tax, and those taxpayers would thus face tax increases. Many households with very low incomes who would not have to file tax returns under the 1984 law and are therefore not represented in the table would have to file returns and pay taxes under System 1 in which all income would be subject to tax without exemption or deduction. The impact of this factor on the table would likely be small, though it would significantly change administrative burdens under the tax system.

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TABLE 7. (Continued)

Expanded Income[b] (in thousands of dollars)	Number of Taxable Returns (in thousands)	Tax Liability 1984 Law (in millions of dollars)	System 4 (18.7 percent tax on taxable income as in System 3, with $1,500 personal exemption and $3,000 ($6,000) zero bracket amount for single (joint) returns)		
			Tax Liability (in millions of dollars)	Change in Tax (in percents)	Change in Tax (dollars per return)
0 - 5[c]	6,482	403	1,996	395.2	245.71
5 - 10	15,057	5,772	5,345	-7.4	-28.33
10 - 15	13,092	12,526	12,698	1.4	13.11
15 - 20	10,737	17,462	18,802	7.7	124.76
20 - 30	16,800	44,080	48,170	9.3	243.45
30 - 50	13,568	63,833	68,804	7.8	366.41
50 - 100	3,580	38,687	36,104	-6.7	-721.60
100 - 200	631	18,656	14,344	-23.1	-6,833.56
200 and above	164	16,385	11,843	-27.7	-27,692.33
Total or Average	80,110	217,803	218,106	0.1	3.78

first $19,000 of income; 25 percent from $19,500 to $75,000; and 39 percent over $75,000.[66] This tax would provide $1,000 personal exemptions for each dependent and a $3,000 exemption for married couples and would represent a comprehensive income tax that also eliminated the double taxation of dividends. Even though the tax was designed to replicate the progressivity and yield of the current income tax, its enactment would raise taxes for about 55 percent of taxpayers and correspondingly lower them for the other 45 percent.[67]

Less Than Fully Comprehensive Base Broadening. Base broadening need not be so extensive as to involve the repeal of all tax preferences. The Congress might want to preserve preferences that reflect differences in economic circumstances or that subsidize activities that the Congress wants to encourage or whose elimination would represent such a dramatic departure from current law as to cause economic dislocation.

The revenue losses from selected tax preferences (also called tax expenditures) are shown in Tables 8 through 11, along with the distributions of the losses by income groups.[68] Elimination of the deduction for charitable contributions, for instance, would increase revenues by $8.8 billion, based on 1981 income levels, with nearly all of the increased revenue coming from those with incomes above $30,000.

The estimates in Tables 8 through 11 were provided by the Department of the Treasury, Office of Tax Analysis. The Treasury cautioned that the estimates reprinted in Table 9 are less reliable than those in Table 8, since the Table 9 estimates are based on information from sources other than income tax returns. The Treasury also listed a number of tax expenditure items for which there was not enough information to make reasonable distribution estimates. These items appear in Table 10.

The Treasury Department did not attempt to allocate corporate tax expenditures to individuals, mainly because of the difficulty in determin-

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66 Statement of John Chapoton, Assistant Secretary of the Treasury for Tax Policy, before the Senate Finance Committee (September 28, 1982), p. 5.

67 Ibid.

68 The distributions are shown by adjusted gross income groups. Adjusted gross income does not include the sixty percent of capital gains that is untaxed or other items subject to the minimum tax. The differences between adjusted gross income and the broader concept of expanded income occur mainly in the higher income classes.

TABLE 8. REVENUE LOSS FROM TAX EXPENDITURES FOR INDIVIDUALS, DISTRIBUTED BY ADJUSTED GROSS INCOME CLASS ON THE BASIS OF TAX RETURN DATA, 1982 LAW AND 1981 INCOME LEVELS (In millions of dollars)

Adjusted Gross Income Class (In thousands of dollars)	Exclusion of Income Earned Abroad by U.S. Citizens	Investment Credits Other Than Energy Credits[a,b]	Capital Gains, Excluding Home Sales[c]	Residential Energy Credits		Alternative Conservation and New Technology Credits--Supply Incentives[a]
				Supply Incentives[a]	Conservation Incentives[a]	
Less than 10	4	75	428	17	28	--
10 - 15	14	199	384	7	38	e
15 - 20	21	249	308	19	48	e
20 - 30	53	557	1,140	43	124	e
30 - 50	158	744	2,564	68	130	5
50 - 100	385	745	3,179	34	39	8
100 - 200	221	414	2,148	8	7	12
200 and over	74	454	3,081	2	2	13
Total	930	3,439	13,231	199	415	38

Adjusted Gross Income Class (In thousands of dollars)	Jobs Credit[a]	Deductibiiity of Medical Expenses	Additional Exemption for the Blind	Additional Exemption for the Elderly	Tax Credit for the Elderly[a]
Less than 10	e	85	4	406	40
10 - 15	1	190	1	407	37
15 - 20	1	299	10	260	21
20 - 30	8	827	2	360	19
30 - 50	5	1,201	8	374	16
50 - 100	10	614	2	225	3
100 - 200	6	150	1	76	e
200 and over	3	56	2	23	e
Total	35	3,422	28	2,131	135

(Continued)

SOURCE: Department of the Treasury, Office of Tax Analysis, September 23, 1982.

NOTE: Details may not add to totals because of rounding.

a. Based on 1980 distributions.

b. Includes the investment credits for increasing research activities, the rehabilitation of structures, and other investment.

TABLE 8. (Continued)

Adjusted Gross Income Class (In thousands of dollars)	Dividend and Interest Exclusion	Deductibility of Mortgage Interest on Owner-Occupied Homes	Deductibility of Property Tax on Owner-Occupied Homes	Deductibility of Charitable Contributions[d]	Child and Dependent Care Credit[a]	Work Incentive Program Credit[a]
Less than 10	24	220	109	36	92	--
10 - 15	28	343	198	129	218	2
15 - 20	30	892	374	249	188	e
20 - 30	87	3,633	1,429	985	382	2
30 - 50	170	8,639	3,252	2,550	364	4
50 - 100	128	4,672	2,291	2,109	62	7
100 - 200	33	979	725	1,126	7	2
200 and over	8	225	302	1,652	1	e
Total	506	19,602	8,679	8,836	1,314	17

Adjusted Gross Income Class (In thousands of dollars)	Deductibility of Casualty Losses	Earned Income Credit	Credit for Political Contributions[a]	Deductibility of Nonbusiness State and Local Taxes Other than on Owner-Occupied Homes
Less than 10	8	533[f]	8	118
10 - 15	21	--	9	230
15 - 20	41	--	9	497
20 - 30	109	--	18	2,276
30 - 50	249	--	21	6,289
50 - 100	178	--	21	5,050
100 - 200	52	--	11	2,032
200 and over	37	--	1	1,352
Total	695	533[f]	80	17,844

c. Includes capital gains treatment of coal royalties, iron ore, certain timber and agricultural income, and other income.

d. Includes the deductibility of charitable contributions for education, health, and other. The estimates exclude amounts claimed by nonitemizers, estimated to total $180 million.

e. Less than $500,000.

f. The effect of the credit on receipts. The effect on outlays equals $1,283 million, all of which is claimed by individuals with less than $10,000 adjusted gross income.

TABLE 9. REVENUE LOSS FROM TAX EXPENDITURES FOR INDIVIDUALS, DISTRIBUTED BY ADJUSTED GROSS INCOME CLASS ON THE BASIS OF DATA FROM SOURCES OTHER THAN TAX RETURNS, 1982 LAW AND 1981 INCOME LEVELS (In millions of dollars)

Adjusted Gross Income Class (In thousands of dollars)	Exclusion of Veterans' Preferences[a]	Exclusion of Interest on State and Local Bonds[b]	Deductibility of Interest on Consumer Credit	Deferral of Capital Gains on Home Sales	Exclusion of Capital Gains on Home Sales for Persons Age 55 and Over	Exclusion of Employer Contributions for Medical Insurance Premiums and Medical Care
Less than 10	858	4	9	8	3	888
10 - 15	520	5	98	4	1	1,191
15 - 20	482	7	232	52	9	1,464
20 - 30	815	25	1,566	146	79	3,851
30 - 50	504	230	3,606	341	183	4,470
50 - 100	176	2,019	1,888	294	60	1,450
100 - 200	37	1,441	549	90	30	252
200 and over	8	868	199	34	15	53
Total	3,400	4,599	8,246	967	380	13,619

SOURCE: Department of the Treasury, Office of Tax Analysis, September 23, 1982.

(Continued)

NOTE: Details may not add to totals because of rounding.

a. Includes the exclusion of benefits and allowances to Armed Forces personnel, military disability pensions, veterans' disability compensation, veterans' pensions, and GI bill benefits.

TABLE 9. (Continued)

Adjusted Gross Income Class (In thousands of dollars)	Exclusion of Social Security and Railroad Retirement Benefits[c]	Exclusion of Workers' Compensation Benefits	Exclusion of Untaxed Unemployment Insurance Benefits	Exclusion of Disability Pay	Net Exclusion of Pension Contributions and Earnings[d]	Exclusion of Insurance Premiums[e]
Less than 10	5,029	786	1,073	127	964	83
10 - 15	1,787	444	560	22	1,371	112
15 - 20	1,254	314	205	1	1,893	163
20 - 30	1,832	664	272	3	5,495	444
30 - 50	1,278	345	9	---	8,306	642
50 - 100	731	93	---	---	4,345	282
100 - 200	209	20	---	---	1,463	89
200 and over	55	8	---	---	513	36
Total	12,165	2,674	2,119	153	24,350	1,851

b. Includes the exclusion of interest on pollution control bonds, industrial development bonds, housing bonds for owner-occupied homes and rental housing, student loan bonds, hospital bonds, and general purpose state and local debt.

c. Includes the exclusion of disability insurance benefits, OASI benefits for retired workers, benefits for dependents and survivors, and railroad retirement system benefits.

d. Includes the exclusion of contributions and earnings for employer plans and plans for the self-employed and others.

e. Includes premiums for group-term life insurance and accident and disability insurance.

TABLE 10. TAX EXPENDITURES FOR INDIVIDUALS FOR WHICH DISTRIBUTION DATA ARE UNAVAILABLE

Expensing of research and development expenditures

Expensing of exploration and development costs, fuel and nonfuel minerals

Excess of percentage over cost depletion, fuel and nonfuel minerals

Tax incentives for preservation of historic structures

Cash accounting for agriculture

Exclusion of interest on life insurance savings

Expensing of construction period interest and taxes

Carryover basis of capital gains at death

Amortization of start-up costs

Exclusion of interest on certain savings certificates

Five-year amortization for housing rehabilitation

Exclusion of employee meals and lodging (other than military)

Employer educational assistance

Exclusion of contributions to prepaid legal plans

Exclusion of income of trusts to finance supplementary unemployment insurance benefits

Deductibility of certain adoption expenses

Deferral of interest on savings bonds

Parental personal exemption for students age 19 and over

Exclusion of special benefits for disabled coal miners

SOURCE: Department of the Treasury, Office of Tax Analysis, September 23, 1982.

TABLE 11. DISTRIBUTION OF TAX RETURNS AND TAX LIABILITY BY ADJUSTED GROSS INCOME CLASS, 1982 LAW AND 1981 INCOME LEVELS

Adjusted Gross Income Class (In thousands of dollars)	Total Number of Returns (In thousands)	Total Number of Taxable Returns (In thousands)	Tax Liability[a] (In millions of dollars)
Less than 10	34,366	17,207	6,600
10 - 15	13,457	13,226	14,582
15 - 20	10,936	10,832	20,394
20 - 30	17,254	17,176	52,815
30 - 50	13,538	13,498	77,958
50 - 100	3,384	3,375	46,379
100 - 200	549	549	21,288
200 and over	116	116	16,093
Total	93,600	75,979	256,109

SOURCE: Staff of the Joint Committee on Taxation.

a. Tax liabilities do not include the refundable (outlay) portion of the earned income credit. Liability reflects major Economic Recovery Tax Act (ERTA) and Tax Equity and Fiscal Responsibility Act (TEFRA) provisions except Accelerated Cost Recovery System (ACRS), All Savers, IRA, and Keogh provisions.

ing which individuals benefit from particular reductions in corporate income taxes. The Treasury noted that "this omission is extremely important and means that the tables should not be used to indicate the distribution of all tax expenditures by income class." In order to give some perspective on the estimates, Table 11 shows total tax liability by adjusted gross income class, plus the total number of returns filed and the total number of taxable returns.

The models from which the tax expenditure estimates are taken undergo continual updating and improvement, so all of the estimates should be viewed as preliminary and subject to change. This is especially true for those estimates for which no tax return data are available. The estimates nonetheless serve as a useful guide to the approximate distribution by income class of a large number of existing tax expenditures.

Because of interactions among provisions and with the zero bracket amount, it is not possible to calculate the amount of revenue that would be raised from repeal of two or more provisions simply by summing the revenue losses of each of the provisions. Such a simple summing gives a rough idea of the potential revenue gain, however. The rate reductions would have to be tailored to the distribution of revenue gain by income group if the ultimate goal was preservation of both the yield and the distribution of the current tax.

CHAPTER V. INDEXING THE INCOME TAX BASE FOR INFLATION

INTRODUCTION

Unless the income tax is adjusted for inflation, rising prices increase real taxes on capital income, with some kinds bearing a greater burden than others. As explained in the next chapter, a consumption tax would not experience this problem because it would not tax income from capital. The problems posed by inflation can, however, be addressed directly within the framework of an income tax, either through ad hoc savings and investment incentives, like some of those in current law, or by indexing the income tax base for inflation. The necessary components of the tax base that would be indexed are capital gains, interest income and expense, depreciation, and costs of goods used from inventories.[1]

Difference Between Bracket Indexing and Base Indexing

Inflation causes two distinct problems for an income tax, and separate kinds of indexing--bracket indexing and base indexing--are required for each to neutralize the tax to the effects of inflation--that is, to keep real tax liabilities constant when real incomes remain unchanged. The first problem, commonly called "bracket creep," affects income from labor (wages and salaries) and capital equally and arises because the basic graduated tax rate structure, personal exemptions, and zero-bracket amounts are all denominated in dollars whose real value erodes with inflation. During inflationary periods, nominal incomes that rise just enough to maintain constant purchasing power are pushed into higher income tax brackets, so that tax burdens rise by more than the inflation rate. The tax bracket indexation enacted in 1981 and scheduled to go into effect in 1985 will eliminate this bracket creep by periodically adjusting tax brackets, personal exemptions, and zero bracket amounts to keep them

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1 For very good, thorough explanations of the issues involved in indexing the income tax base for inflation, see Vito Tanzi, Inflation and the Personal Income Tax (Cambridge, England: Cambridge University Press, 1980); and Henry Aaron, ed., Inflation and the Income Tax, (Washington, D.C.: The Brookings Institution, 1976). Tanzi's book also provides descriptions of indexing techniques used in foreign countries.

in line with inflation.[2] Bracket creep would also be eliminated if the tax was made proportional rather than progressive.

Probably the more serious problem, and the one more difficult to correct, is the mismeasurement of income (or of the tax base) caused by inflation. This problem affects only income from capital and could be corrected by tax base indexing, the subject of this chapter. Tax base indexing would convert costs of earning investment income to current dollars (that is, dollars of the year in which the investment income is realized). When the restated costs were subtracted from the current dollar receipts to calculate taxable income, the result would then be an accurate measure of real income. Since investment expenditures are made before the resulting receipts are earned--often many years before--failure to measure capital expenditures and receipts in dollars of the same purchasing power causes capital income to be overstated and hence overtaxed during inflationary periods, even if bracket indexation or a flat-rate tax is in place.[3] This problem arises when income is earned some time after an investment is made and, therefore, does not generally affect labor income, which is usually paid in the same year as work is done.

What Tax-Base Indexing Entails

Net taxable income is mismeasured during inflation because income from capital gains and interest income and expense are overstated, while depreciation and the cost of production goods taken from inventories are understated. Under tax-base indexing, these items would be measured at their real worth. Although depreciation and the cost of inputs taken from inventories figure more prominently in the determination of corporate than

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2 Bracket indexation is discussed in Congressional Budget Office, Indexing the Individual Income Tax for Inflation (September 1980). For an explanation of the bracket indexing that will become law in 1985, see Joint Committee on Taxation, General Explanation of the Economic Recovery Tax Act of 1981 (H.R. 4242, 97th Congress: P.L. 97-34) (December 31, 1981), pp. 38-40.

3 This problem occurs whenever there is inflation, even if the rate of inflation is declining. Whenever there is inflation, capital income is overtaxed in the sense that it is taxed at a higher rate than if there were no inflation. To the extent that tax preferences for capital income compensate for the effects of inflation, there may actually be little or no overtaxation of some capital income, but the rates of tax may vary widely among investments, leading to misallocations of capital and inequities in taxation.

individual income, they do affect the individual income tax because individuals are taxed on dividends and on business income from self-employment and partnerships. Because capital gains and interest income are more important overall for individual income taxation, this chapter focuses on them and only briefly surveys the problems inflation poses for depreciation and inventory tax accounting.

Tax-base indexing is not meant to compensate investors for losses incurred as a result of inflation. Rather, it is intended to restore the income tax to what it would be in the absence of inflation, so that only investment returns that represent real increases in purchasing power are taxed. Although inflation may push up nominal interest rates and reduce the real value of bonds carrying lower interest rates, for instance, tax-base indexing is not intended to compensate bondholders for these losses. The indexing simply ensures that taxpayers are allowed to deduct these real losses, just as they would if there were no inflation and they sold bonds for less than the purchase price.

Evaluation of Base Indexing Considering Tax Preferences for Capital Income

It is difficult to assess the merits of tax-base indexing because the current income tax departs in so many ways from a pure, "neutral" income tax, even when there is no inflation. Since tax-base indexing essentially restores the income tax to the tax that would be in place were there no inflation, it cannot be evaluated independently of other tax provisions. If the current income tax were ideal in every respect other than that its base was not indexed for inflation, tax-base indexing would unambiguously confer efficiency and equity gains.[4] Regardless of the inflation rate, tax would then be imposed uniformly on all real income.

As discussed in Chapter III, the current income tax departs from the ideal not only because its base is not indexed for inflation, but also because the corporate and individual income taxes are not integrated and there are many tax preferences for capital income. Some have argued that the tax preferences for capital income amount to an imprecise indexing of all of the necessary tax base items except interest income and expense.[5]

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4 These gains would be greater the higher, more unpredictable, and more persistent the inflation, and the higher and more progressive the marginal tax rates.

5 ". . . This is not to argue that the real returns from holding other than interest-bearing assets are immune to inflation, but rather that the

Some of the more important tax preferences for saving and investment are considered below when they are relevant to the discussions on indexing capital gains, interest income and expense, depreciation, and inventories. Because of the uncertainty about which, if any, of the tax preferences would be repealed if tax-base indexing were adopted, the conclusions drawn in other chapters about the efficiency, equity, and simplicity effects of a tax change are not easy to draw for tax-base indexing.

CAPITAL GAINS

Tax is currently imposed on 40 percent of nominal capital gains, which are the difference between the sale and purchase prices of assets.[6] Thus, some tax is collected (and some would be collected even if tax brackets were indexed) on the sale of an asset that appreciated at just the inflation rate. Since in real terms that asset did not appreciate at all, it produced no real income, and no tax would be collected on its sale if the income tax base were indexed for inflation. Capital gains indexation simply adjusts the tax base so that taxpayers are exempted from paying tax on the portion of nominal gain needed to maintain the purchasing power of their initial investment. With indexation, therefore, tax is imposed only on real gains--increases in real net worth--and not on nominal gains resulting only from inflation.

Even when there is little or no inflation, nominal capital gains can greatly exceed real gains as a result of previous high inflation. For example, even though there had been no inflation for five years, an asset held for ten years and sold at a nominal gain of 60 percent would not have

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various forms of exclusion, deferral, and other tax reduction have the effect of providing at least an ad hoc form of indexing to most other forms of capital income, albeit in an imperfect, uneven and haphazard way." (Harvey Galper and Eugene Steuerle, "Tax Policy and Savings," presented at the Annual Southern Economic Association Meeting, 1981, p. 30.)

6 This discussion is confined to capital gains on noninterest-bearing and nondepreciable assets. Indexing the other gains is discussed below in the sections on indexing interest and depreciation for inflation. For an excellent explanation of capital gains indexing and the tax preferences for capital gains, see Roger Brinner and Alicia M[illegible]ll, "Taxation of Capital Gains: Inflation and Other Problems," New England Economic Review (September/October 1974), pp. 3-21.

appreciated at all in real terms if the annual inflation rate during the first five years had been 10 percent ($(1.10)^5 = 1.60$).[7]

Mechanics of Capital Gains Indexation

Indexing capital gains requires one additional calculation per transaction compared to current law. Before gain is calculated, the purchase price of an asset must be converted to the price level prevailing at the sale date. The purchase price is converted by multiplying it by the ratio of the general price level at the sale date to the general price level at the purchase date. (The IRS would publish tables of the conversion factors for different purchase and sale dates.) The resulting adjusted purchase price is then subtracted from the sale price to determine the gain on which tax is assessed.

For example, if an asset is purchased for $100 and sold a year later for $115, and if inflation is 10 percent during the year, the real gain is $5.

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7 The taxation of capital gains is most distorted when high rates of inflation persist over long periods of time, but it is also distorted during prolonged periods of relatively low inflation. The price level doubles after ten years of 7 percent annual inflation (12 years of 6 percent inflation or 15 years of 5 percent inflation), for instance, so real capital gains are experienced then only on assets sold for more than twice their nominal purchase price.

Between December 1974 and December 1981, the 500 stocks represented in the Standard and Poor's composite index rose in nominal value by 85 percent, while the CPI rose by 81 percent over the same period. (This is equivalent to 7 years of 8.9 percent annual inflation.) (Economic Report of the President (February 1982), pp. 291, 337; and (January 1976), pp. 220, 266.) Had the portfolio represented by the Standard and Poor's index been purchased at the beginning of this period and sold at the end, its owner would have had to pay tax of 9 percent of the value of the portfolio, more than the increase in the portfolio's purchasing power. (This assumes that the owner was in the 50 percent tax bracket.)

A study of the actual capital gains reported on a sample of 30,000 tax returns in 1973 concluded that the aggregate nominal gains of $4.63 billion that were reported correspond to real losses of $910 million. (Martin Feldstein and Joel Slemrod, "Inflation and the Excess Taxation of Capital Gains on Corporate Stock," National Tax Journal (June 1978), p. 110.)

This is calculated by converting the $100 purchase price into the dollars prevailing at the time of sale:

Real Gain = $115 - ($100 x 1.1) = $115 - $110 = $5.

At the end of the year, the asset's owner needs to recover $110 just to maintain the purchasing power of his initial investment; only amounts in excess of $110 represent an increase in real command over goods and services. If capital gains were indexed, tax would be due only on the $5 real gain in this example. Under current law, tax in this case would be imposed on $6, which is 40 percent of the nominal gain of $15.

Table 12 illustrates the calculation of indexed capital gains for several examples, including the one just described which appears in row 7. All examples assume asset owners are in the 50 percent tax bracket. The examples are grouped into three sets showing the effects of inflation rates of zero, ten, and fifteen percent. The table shows that, under current law, tax is sometimes collected on the sale of assets that lost value in real terms (that is, whose prices failed to keep pace with inflation). This occurs in the table when the entry in Column 7, "Tax Due Under Current Law," is positive even though the entry in Column 6, "Indexed (Real) Capital Gain" is negative. In these and some other cases, the tax due exceeds the entire real capital gain, so that tax rates on real gains exceed 100 percent (see entries reading "over 100" in Column 8, "Tax Due As Percent of Real Gain"). The top set of examples is based on an inflation rate of zero and illustrates that, when there is no inflation, capital gains are taxed at much less than the 50 percent rate applying to other income of the taxpayers in these examples.

Tax Preferences for Capital Gains

In theory, income is earned when net worth increases, which occurs not all at once on the sale of an asset but gradually whenever the asset appreciates. Ideally, then, capital gains should be taxed as they accrue, and not only upon sale. Taxing only on sale, as under current law, allows owners to defer payment of tax, which has the effect of lessening the tax burden, since the tax can earn interest between the time it should theoretically be paid and the time the law requires it to be paid.[8]

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8 Taxing gains only on sale also allows taxpayers to time the realization of gains and losses to minimize taxes. Under a graduated-rate tax, taxpayers benefit by selling at a gain (realizing gains) when they are in low tax brackets. They can realize losses and reduce tax liabilities while holding appreciating assets for a longer period. The appreciation

Ideally, taxpayers would include in taxable income 100 percent of real (indexed) capital gains on accrual and the allowed full deductibility of real losses. Compared to this theoretical ideal, current law both overtaxes capital gains, because the gains are not indexed for inflation, and undertaxes them, because only 40 percent of nominal gains is taxed and then only on sale rather than on accrual of gains.

Certainly neither the capital gains exclusion nor taxation on sale rather than accrual was enacted solely as a substitute for capital gains indexation, although Congress increased the exclusion from 50 to 60 percent in 1978 partly to offset the effects of inflation.[9] Nevertheless, the tax preferences for capital gains should be considered in an evaluation of capital gains indexation.

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on assets held until death escapes income taxation completely, since the heir's tax basis is the asset's value on inheritance (called "stepped-up basis").

Ideally, capital losses should be fully deductible as they accrue, mirroring the ideal treatment of capital gains. Currently, taxpayers are sharply limited in the amount of net capital loss that they can deduct annually. If capital gains and losses were taxed on accrual, this kind of limitation would not be necessary because there would no longer be a tax advantage in realizing losses and deferring gains.

9 Joint Committee on Taxation, General Explanation of the Revenue Act of 1978, P.L. 95-600 (March 12, 1979), p. 252. Inflation has increased the tax rate on real capital income over the past 25 years, but Congressional ad hoc tax reductions, such as the capital gains tax reduction, were motivated partly by a desire to offset the effects of inflation. Opinions on Congressional motivations and their relevance differ widely. For example, see Martin Feldstein and Lawrence Summers, "Inflation and the Taxation of Capital Income in the Corporate Sector," National Tax Journal (December 1979), pp. 445-470; Jane Gravelle, "Inflation and the Taxation of Capital Income in the Corporate Sector: A Comment," National Tax Journal (December 1980), pp. 473-483; and Martin Feldstein and Lawrence Summers, "Inflation and the Taxation of Capital Income in the Corporate Sector: Reply," National Tax Journal (December 1980), pp. 485-488.

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TABLE 12. CALCULATION OF INDEXED (REAL) CAPITAL GAIN AND TAX DUE UNDER CURRENT LAW AND AS PERCENTAGE OF REAL GAIN[a]

(1) Nominal Sale Price (In dollars)	(2) Nominal Purchase Price (In dollars)	(3) Nominal Gain ((1)-(2)) (In dollars)	(4) Inflation Rate (In percents)
95	100	-5	0
100	100	0	0
105	100	5	0
110	100	10	0
105	100	5	10
110	100	10	10
115	100	15	10
120	100	20	10
110	100	10	15
115	100	15	15
120	100	20	15
125	100	25	15

(Continued)

a. Examples assume assets are held for one year and owners are in the 50 percent tax bracket.

TABLE 12. (Continued)

(5) Adjusted Purchase Price[b] (In dollars)	(6) Indexed (Real) Capital Gain ((1)-(5)) (In dollars)	(7) Tax Due Under Current Law[c] (In dollars)	(8) Tax Due Currently As Percentage of Real Gain ((7)/(6))
100	-5	-1	20
100	0	0	20
100	5	1	20
100	10	2	20
110	-5	1	over 100[d]
110	0	2	over 100[d]
110	5	3	60
110	10	4	40
115	-5	2	over 100[d]
115	0	3	over 100[d]
115	5	4	80
115	10	5	50

b. Adjusted purchase price is nominal purchase price multiplied by the ratio of the price level at the end of the year to the price level at the beginning of the year.

c. Tax is due on 40 percent of nominal gain. In the example of the third row, tax is due on $2 (40 percent of $5), so $1 tax is due (since the owner is assumed to be in the 50 percent tax bracket).

d. Tax due exceeds 100 percent of the real gain.

Net Effect of the Current System

For any given transaction, the theoretically ideal tax treatment outlined above can be replicated by taxing only a percentage of nominal capital gains on sale. (For asset values that failed to keep up with inflation, these percentages would be negative, reflecting the fact that the assets were sold at real losses.) The percentage that would be taxed--the inclusion factor--would be different for each transaction, and would vary depending on the inflation rate, the real rate of asset appreciation, and the length of time that the asset had been owned. It is possible to calculate ideal inclusion factors for a variety of inflationary conditions. If the ideal inclusion factors were all very close to 40 percent (the inclusion factor currently in the law), one could conclude that current law approximates the ideal tax treatment.[10]

If there were no inflation and an asset were held only one year, the ideal inclusion factor would be 100 percent, more than double the current inclusion factor of 40 percent. There would be no need to tax less than 100 percent of nominal gains as an inflation adjustment since there had been no inflation, and there would be no need to charge extra tax to make up for the deferral advantage of taxing on sale rather than on accrual since, with a holding period of only one year, taxation on sale would be roughly equivalent to taxation on accrual. If an asset appreciated at just the inflation rate, the ideal inclusion factor would be zero, regardless of the inflation rate or how long the asset was held. In this case, a 40 percent inclusion rate is far too large.

Table 13 shows the wide range of ideal inclusion factors for different investments made by a taxpayer in the 50 percent tax bracket. For a 4 percent real rate of capital appreciation (see the upper half of the table), ideal inclusion factors range from 27 percent for assets held only one year when the inflation rate is 12 percent to 123 percent for assets held 25 years when there is no inflation.[11] (The range of ideal inclusion factors would be wider if the table showed values for inflation rates above 12 percent and holding periods longer than 25 years.) The lower half of Table 13 indicates that ideal inclusion factors would be considerably lower for

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10 Actually, there is no fixed inclusion factor under which taxpayers would behave as they would under the ideal tax treatment of capital gains. As long as there is a fixed inclusion factor and gains are taxed on realization, taxpayers have an incentive to defer realization.

11 The real rate of appreciation is the rate over and above that needed to maintain the purchasing power of the initial investment. The real rate of appreciation would be 4 percent, therefore, if the nominal rate of appreciation was 12 percent and the inflation rate 8 percent.

TABLE 13. PERCENTAGE OF NOMINAL CAPITAL GAINS THAT WOULD BE TAXED ON SALE UNDER THEORETICALLY IDEAL TAX TREATMENT OF CAPITAL GAINS[a]

Holding Period (In years)	Inflation Rate (In percents)			
	0	4	8	12
	Real Rate of Appreciation of 4 Percent			
1	100	51	35	27
5	104	57	42	35
10	109	65	51	45
15	114	73	61	56
25	123	90	81	79
	Real Rate of Appreciation of 1 Percent			
1	100	21	12	9
5	101	22	14	11
10	102	25	17	14
15	103	28	20	17
25	106	33	26	24

SOURCE: Congressional Budget Office calculations based on methodology presented in Roger Brinner, "Inflation, Deferral, and the Neutral Taxation of Capital Gains," National Tax Journal (December 1973), pp. 565-573.

a. Investor is assumed to be in the 50 percent tax bracket. When the asset is assumed to appreciate at a real rate of 4 percent annually, the nominal appreciation rates for this asset would be 4, 8, 12, and 16 percent for inflation rates of 0, 4, 8, and 12 percent, respectively. For any given inflation rate and holding period, inclusion factors would be lower for lower real rates of return and slightly higher for lower marginal tax rates.

assets that appreciated at a real rate of only 1 percent instead of the 4 percent rate assumed in the upper half of the table.[12]

Table 13 shows that no single inclusion factor can replicate the theoretically ideal tax treatment of capital gains under all plausible, or even all likely, circumstances.

Implementation of the Ideal Tax Treatment of Capital Gains

Taxation of 100 percent of real (indexed) capital gains on accrual would complicate the income tax. Accrual taxation is probably administratively infeasible because of valuation and liquidity problems (see Chapter III), but it could be approximated by taxing only on sale or death and assessing an extra charge for deferral, based on the length of the time the asset was held.[13] The IRS could publish the interest fees charged for deferral in the same table as the adjustment factors for inflation indexing. Figure 1-A illustrates an example of a revised capital gains tax form that

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12 Some tax reform proposals would attempt to compensate for the effects of inflation by exempting varying percentages of gain from taxation, with the exempt percentage increasing with the duration of ownership. Since, as shown in Table 12, ideal inclusion rates increase, rather than decrease, with the holding period, this is not a correct approach to the problem.

13 See Roger Brinner, "Inflation, Deferral, and the Neutral Taxation of Capital Gains," National Tax Journal (December 1973), pp. 565-573; and James Wetzler, "Capital Gains and Losses," in Joseph Pechman, ed., Comprehensive Income Taxation (The Brookings Institution, 1977), pp. 115-162.

Taxation on accrual would be feasible for regularly traded assets such as common stock. The Canadian Minister of Finance proposed establishing special accounts for the purchase of stock beginning October 1, 1983. The stock would be valued annually and owners would be taxed each year on the annual change in the real value of their accounts. (Tax due would be paid over a four-year period.) This proposal would thus combine indexation with taxation on accrual, but only for shares of common stock held in these special accounts. (Allan MacEachen, Deputy Prime Minister and Minister of Finance, Inflation and the Taxation of Personal Investment Income (Canada: Department of Finance, June 1982), pp. 31-35; and Marc Lalonde, Minister of Finance, The Indexed Security Investment Plan (Canada: Department of Finance, April 1983).)

FIGURE 1-A. POSSIBLE REVISION OF SCHEDULE D FOR LONG-TERM CAPITAL GAIN TAXATION (In dollars)

CURRENT FORM

PART II. Long-Term Capital Gains and Losses--Assets Held More Than One Year

a. Kind of Property and Description (Example, 100 shares of "Z" Corp.)	b. Date Acquired (Mo., Day, Year)	c. Date Sold (Mo., Day, Year)	d. Gross Sales Price Less Expense of Sale	e. Cost or Other Basis, As Adjusted	f. Gain (or Loss)
100 shares, "Z" Corp.	Mar. 4, 1973	Nov. 22, 1981	280	130	150

REVISED FORM

PART II. Long-Term Capital Gains and Losses--Assets Held More Than One Year

a. Kind of Property and Description (Example, 100 shares of "Z" Corp.)	b. Date Acquired (Mo., Day, Year)	c. Date Sold (Mo., Day, Year)	d. Gross Sales Price Less Expense of Sale	e. Cost or Other Basis, As Adjusted	f. Cost Multiplied by Inflation Adjustment	g. Inflation-Adjusted Gain (d minus f)	h. Gain Multiplied by Interest Adjustment[a]
100 shares, "Z" Corp.	Mar. 4, 1973	Nov. 22, 1981	280	130	254	26	28

SOURCE: Congressional Budget Office update of Roger Brinner and Alicia Munnell, "Taxation of Capital Gains: Inflation and Other Problems," New England Economic Review (September/October 1974), Figure 1, pp. 18-19.

a. Indexed taxable gain including the appropriate interest charge for deferral.

FIGURE 1-B. TABLE TO ACCOMPANY REVISED SCHEDULE D

Date of Purchase	(1) Inflation Adjustment	(2) Interest Adjustment	Date of Purchase	(1) Inflation Adjustment	(2) Interest Adjustment
1939	6.262	1.461	Jan. 1978	1.392	1.024
1940	6.202	1.452	Feb. 1978	1.383	1.024
1941	5.907	1.442	Mar. 1978	1.372	1.024
1942	5.338	1.432	Apr. 1978	1.360	1.024
1943	5.029	1.422	May 1978	1.348	1.024
1944	4.943	1.412	June 1978	1.334	1.024
1945	4.833	1.402	July 1978	1.324	1.024
1946	4.453	1.392	Aug. 1978	1.317	1.024
1947	3.894	1.382	Sept. 1978	1.307	1.024
1948	3.613	1.371	Oct. 1978	1.297	1.024
1949	3.648	1.360	Nov. 1978	1.290	1.024
1950	3.613	1.350	Dec. 1978	1.284	1.024
1951	3.348	1.339			
1952	3.277	1.328	Jan. 1979	1.273	1.012
1953	3.252	1.318	Feb. 1979	1.258	1.012
1954	3.236	1.307	Mar. 1979	1.246	1.012
1955	3.248	1.295	Apr. 1979	1.232	1.012
1956	3.200	1.284	May 1979	1.217	1.012
1957	3.090	1.273	June 1979	1.203	1.012
1958	3.008	1.262	July 1979	1.190	1.012
1959	2.984	1.250	Aug. 1979	1.178	1.012
1960	2.937	1.239	Sept. 1979	1.166	1.012
1961	2.907	1.227	Oct. 1979	1.156	1.012
1962	2.875	1.216	Nov. 1979	1.145	1.012
1963	2.841	1.204	Dec. 1979	1.133	1.012
1964	2.804	1.193			
1965	2.757	1.181	Jan. 1980	1.117	1.000
1966	2.680	1.169	Feb. 1980	1.102	1.000
1967	2.605	1.157	Mar. 1980	1.086	1.000
1968	2.500	1.145	Apr. 1980	1.074	1.000
1969	2.372	1.133	May 1980	1.064	1.000
1970	2.240	1.121	June 1980	1.052	1.000
1971	2.148	1.109	July 1980	1.051	1.000
1972	2.079	1.097	Aug. 1980	1.045	1.000
1973	1.957	1.085	Sept. 1980	1.035	1.000
1974	1.764	1.073	Oct. 1980	1.026	1.000
1975	1.616	1.061	Nov. 1980	1.017	1.000
1976	1.528	1.049	Dec. 1980	1.008	1.000
1977	1.435	1.037			

could be used for this purpose and Figure 1-B provides a table of the inflation and interest adjustments to accompany it. The last column (h) in the revised form shows the indexed taxable gain including the appropriate interest charge for deferral.

Pros and Cons of Indexing Capital Gains and Repealing Tax Preferences for Capital Gains

The complexity and administrative burden of the revised tax form and table needed to implement the ideal tax treatment of capital gains have to be weighed against the imprecision of current law. In addition, as explained in the conclusion to this chapter, some argue that capital gains should not be indexed for inflation unless interest expense is also indexed.

Capital gains indexing could be enacted without changing the tax treatment of capital gains in any other way, rather than as part of the complete revamping just discussed. Indeed, the Senate version of the Tax Equity and Fiscal Responsibility Act of 1982 would have indexed capital gains without otherwise changing their tax treatment.

Several arguments can be made in favor of retaining the exclusion of 60 percent of long-term capital gains from taxation and the tax exemption of gains on assets given to charity or held until death. These provisions can be considered a general investment incentive or a means of moderating the double taxation of dividends--or what some analysts feel is the overly heavy rate of tax on savings inherent in income taxation. On the other hand, other arguments currently used to support the provisions would be invalidated if capital gains were indexed and a charge for deferral was imposed. The preferences could no longer be considered a substitute for explicit indexation, nor would they be needed to counteract the discouragement of selling and reinvesting caused by taxing capital gains only on sale.[14]

INTEREST INCOME AND EXPENSE

When there is no inflation, interest receipts represent an increase in real net worth. Thus, they fit the definition of income and should be taxed

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14 Turnover of investments is discouraged (so investment is "locked in") when capital gains are taxed only on sale, since it pays to sell and reinvest only when a new investment is expected to return enough more than the old to pay the capital gain tax. Any reduction in the tax rate on capital gains, therefore, encourages turnover.

in full to the recipient (whether an individual under the individual income tax or a corporation under the corporate income tax). Interest paid by a business is a cost of doing business which should be deductible in full to compute the net income on which tax is due, as long as there is no inflation. (Amounts paid in interest reduce the business owner's command over goods and services.) Consumer durable and mortgage interest payments pose a more complicated problem. In the absence of inflation, they should be deductible in full, but the imputed income provided by the goods that they finance should be taxed (see Chapter III).[15]

The Problem

In the absence of inflation, the rate of individual income tax on interest income ranges from 12 percent to 50 percent--the range of marginal rates. Rates of tax exceeding 100 percent can occur during inflationary periods, however, because all nominal interest is taxed, even though much--sometimes most--of that interest is not interest at all, but rather additional payments required to keep intact the purchasing power of the investor's principal. In these circumstances, the income tax is in essence partly a tax on the principal. The degree to which principal is taxed depends on the investor's marginal tax rate, the rate of inflation, and the interest rate. By the same token, because borrowers are allowed to deduct all nominal interest paid, in many cases they can deduct much more than 100 percent of real interest paid--the government, in effect, pays part of the principal on their loans.

Inflation erodes the real value of debt, reducing borrowers' real liabilities and commensurately reducing the value of lenders' assets as measured by their command over goods and services. When interest income and expense are indexed for inflation, the tax system effectively recognizes these gains and losses resulting from changes in the general price level.

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15 Since this imputed income (such as the rent that a homeowner would have to pay to live in his house if he did not own it) is not currently taxed, consumer and mortgage interest paid by individuals arguably should not be deductible. Since disallowing these interest deductions would not remove the tax advantage of those who own their homes outright (since they would continue to receive imputed rental income tax-free), however, it would effectively discriminate against homeowners with mortgages. For a complete discussion, see Richard Goode, The Individual Income Tax (The Brookings Institution, 1976), pp. 117-125.

The following example illustrates the high tax rates on real interest income that can occur when inflation interacts with the current tax system. If the inflation rate is 11 percent annually and a taxpayer in the 50 percent bracket buys a $1,000 bond yielding a market rate of 15 percent interest, at the end of one year he has earned $150 interest, and paid tax of 50 percent of that amount ($75). He is left then with his initial $1,000 and $75 of after-tax interest. Just to keep the purchasing power of his $1,000 bond even with inflation, however, the investor would have had to receive $110 of interest after taxes ($1,000 x 1.11), so he has earned no real interest after paying taxes and actually lost $35 of his principal ($1,110 -$1,075). Before taxes, the investor earned real interest (over and above that needed to preserve the purchasing power of his bond) of $40:

$$\text{Real Interest Income} = \$1150 - (\$1{,}000 \times 1.11) = \$1{,}150 - \$1{,}110 = \$40.$$

Since $75 tax was paid on this real income of $40, the tax rate on real income was 187 percent.

The taxation of real interest income is heaviest when the rate of inflation is very high, as in the example just cited, but rates of tax exceeding 100 percent can occur at any positive inflation rate. Table 14 presents tax rates on real interest income for investors in the 11, 30, and 50 percent tax brackets holding bonds yielding 4 percent real interest (before tax) under conditions of high, moderate, and no inflation. The high inflation example, denoted as Case A in the table, is the same as that of the last paragraph. In that case, tax as a percentage of real interest income ranges from 41 percent for bondholders in the 11 percent bracket to 187 percent for those in the 50 percent bracket.[16] In the moderate inflation (5 percent) example of Case B, tax ranges from 25 percent of real interest income for bondholders in the 11 percent bracket to 112 percent for those in the 50 percent bracket. When there is no inflation (Case C), all bondholders are taxed on real interest income at the same rate as they are taxed on other income.

This heavy taxation of real interest income is especially severe over extended periods of inflation, particularly for high-bracket investors. After ten years of 11 percent inflation, a 50 percent bracket investor--receiving interest of 15 percent annually but being taxed annually on the entire amount of interest received (without indexing for inflation)--would

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16 Unfortunately, there is no evidence as to whether high-bracket taxpayers have reduced their net saving as a result of the interaction of inflation and the tax system.

TABLE 14. EXAMPLES OF TAX DUE UNDER CURRENT LAW AS A PERCENTAGE OF REAL INTEREST EARNED, BY BONDHOLDER'S MARGINAL TAX RATE[a]

(1) Bondholder's Marginal Tax Rate (In percents)	(2) Nominal Bond Interest (In dollars)	(3) Interest Needed to Maintain Bond's Real Value (In dollars)	(4) Real Interest (2)-(3) (In dollars)	(5) Tax Due on Nominal Interest (1)x(2) (In dollars)	(6) Tax as Percentage of Real Interest Income (5)÷(4) (In percents)
Case A: Inflation Rate = 11%, Bond Interest Rate = 15%					
11	150	110	40	16.5	41
30	150	110	40	45.0	112
50	150	110	40	75.0	187
Case B: Inflation Rate = 5%, Bond Interest Rate = 9%					
11	90	50	40	9.9	25
30	90	50	40	27.0	67
50	90	50	40	45.0	112
Case C: Inflation Rate = 0%, Bond Interest Rate = 4%					
11	40	0	40	4.4	11
30	40	0	40	12.0	30
50	40	0	40	20.0	50

a. Examples are all for a bond costing $1,000 and represent one year's interest and taxes. They assume that nominal interest rates rise one percentage point for each percent of inflation.

be left with the purchasing power of only 73 percent of his initial investment.[17]

Just as taxpayers face penalties for investing in interest-bearing assets during inflationary periods, they are now granted bonuses for borrowing, because they are allowed to deduct all nominal interest that they pay, even though only a fraction of that is real interest. If a taxpayer in the 50 percent bracket borrowed $1,000 for one year at an interest rate of 15 percent, for example, he would owe $1,150 at the end of the year. If there had been 11 percent inflation during that period, $110 of the payment would be needed to maintain the lender's principal, while the remaining $40 would be a payment of real interest. Since the taxpayer is currently allowed to deduct all nominal interest paid, however, he can deduct all $150, bringing his after-tax interest payment down to $75 ($150 x 0.5). Since he is not even paying the $110 needed to keep the loan principal intact, it can be said that he faces a negative real interest rate for borrowing. Of course, the lender does receive the $150 of nominal interest, but the borrower pays only $75 after tax.

The interaction of inflation and the current unindexed income tax thus creates a perverse situation in which savers are taxed at higher than statutory rates (sometimes even higher than 100 percent), while debtors are subsidized. The tax system would not produce this result if the income tax base was indexed for inflation, so that only real interest was taxable and deductible, leaving out in both cases the portion of interest that represents inflation.

Mechanics of Interest Indexation

Indexing interest income and expense would entail breaking down interest into two parts--the real component, which would be taxed, and the inflation component needed to maintain the purchasing power of the principal, which would not be taxed.[18]

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17 If the 50-percent-bracket taxpayer invested $1,000 at 15 percent interest and annually reinvested the principal and after-tax interest, at the end of the 10th year he would have $2,061 after taxes ($1{,}000 \times (1 + (.15)(.5))^{10} = 2{,}061$), although he would have needed $2,839 ($\$1{,}000 \times (1.11)^{10}$) to hold unchanged the purchasing power of his principal.

18 Inflation erodes the real value of all monetary assets, including those that do not bear interest, such as cash, accounts receivable, and demand deposits. In theory, the tax system should recognize real losses and gains experienced on these as well as on interest-bearing

The indexation of interest income can be illustrated with the example used earlier, that of an investor who purchases a bond for $1,000 that pays 15 percent interest during a year when the inflation rate is 11 percent. Nominal interest is $150 in this example, of which $110 ($1,000 x .11) is needed to maintain the purchasing power of the bond, and the remaining $40 is real interest. If interest income were indexed, the investor would owe tax only on the $40 of real interest. If he were in the 50-percent tax bracket, he would pay tax of $20, which is 50 percent of this real interest income. When filing his tax return, the bondholder would include in taxable income the full $150 of nominal interest received from this bond, which he would add to nominal interest received on other bonds, and list the total on one line of his tax return as is done currently. On a separate line, he would deduct the product of his bond principal ($1,000 for this bond plus the principal of his other bonds) multiplied by the inflation rate published by the IRS (11 percent in this example). Similarly, corporations repaying debt, homeowners repaying mortgages, and all other taxpayers who paid interest would deduct the full nominal interest payments for the year, and on a separate line on their tax returns they would include in taxable income their outstanding debt multiplied by the inflation rate published by the IRS.[19]

Even during periods of stable prices, interest rates fall and rise, which causes the prices of existing interest-bearing assets, such as bonds, to fluctuate. The associated capital gains and losses are now taxed on sale,

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monetary assets during inflation. As a practical matter, however, indexing these items would be extremely difficult and costly. Moreover, cash and demand deposits yield a nonmonetary return in the form of liquidity, which is not taxed, so the failure to index noninterest-bearing monetary assets and liabilities is probably not too serious on balance.

19 When the inflation rate exceeds the nominal interest rate, borrowers effectively earn income from their debts, since the annual interest that they pay is less than the annual decline in the real value of their debt. With indexing in this situation, borrowers' interest deductions would be less than the amount added into taxable income to represent the decline in the value of the debt. On net, therefore, borrowers would have to declare income from their debt, rather than get a deduction as they do under current law. Since lenders would be in the reverse situation, they would get a net tax deduction rather than have to declare income when their bonds lost value faster than they earned interest.

rather than annually as they accrue.[20] Under the interest indexing approach just described, capital gains and losses on bond sales would continue to be taxed on realization as they currently are. In effect, interest indexing would allow annual deductions for losses in real bond principal caused by general price inflation, while relative changes in bond prices would be taxed on realization. This treatment would be a move toward accrual taxation. The same result--taxation of real interest income and expense--could be accomplished by using two other indexation approaches: full annual accrual taxation of all real income (interest and capital gains) from interest-bearing assets and indexation of realized capital gains and losses from interest-bearing assets with annual taxation of nominal interest income and expense.[21]

Approximation of Inflation Indexing

A relatively simple approximation of indexing interest would be to tax only a percentage of interest earned and allow only a percentage of interest paid to be deducted. The percentage would be an approximation of the share of interest that is truly interest--in the above example, this would be 26.7 percent, since, with an inflation rate of 11 percent, only 4 percentage points of the 15 percent interest rate represents real interest (4/15 = .267).

Rather than set the inclusion percentage at a different rate for each transaction, the Congress could establish an imprecise but easy-to-admin-

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20 If it were possible to tax income from bonds on accrual, it would be unnecessary to distinguish between capital gains and interest income. Indexing the two for inflation would be done annually in one calculation. Tax would be imposed on real bond income, the increase in the real net worth of the bond investment, which would be calculated annually as the value of the bond at the end of the year plus the interest earned on it during the year minus the value of the bond at the beginning of the year expressed in the dollars prevailing at the end of the year. Taxing bond income on accrual is probably administratively infeasible, however, since it requires annual valuation of all bonds. Bond income, therefore, is not currently taxed on accrual, but rather is broken down somewhat artificially into interest income, which is taxed annually, and capital gain, which is taxed on sale.

21 The approaches are equivalent only if capital gains are taxed in full (not if 60 percent of gains are excluded from tax as under current law). The equivalence of the approaches is described in Tanzi, Inflation and the Income Tax, pp. 54-59.

ister rule whereby a certain percentage of interest earned would be subject to tax and the same percentage of interest paid would be deductible. The percentage to be included could be fixed by law or determined each year by the IRS according to a legislated formula.[22]

A version of the above approach was enacted as part of the Economic Recovery Tax Act of 1981. Beginning in 1985, taxpayers will be allowed a tax deduction for 15 percent of their net interest income (interest income over and above interest paid).[23] This amounts to taxing only 85 percent of nominal interest income and allowing deductions of only 85 percent of nominal interest payments.[24]

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22 One possible formula would be 4/(4 + percentage change in CPI experienced during the year). For example, if the inflation rate were 8 percent, this formula would call for taxing 33 percent of nominal interest and allowing only 33 percent of nominal interest payments to be deducted. If interest income was indexed for inflation for tax purposes, market forces would be expected to push the nominal interest rate to the sum of the real interest rate (which has historically been about 4 percent) and the expected inflation rate. The formula suggested above for the inclusion percentage would be equivalent to the rigorous indexing for inflation outlined above only if inflationary expectations were always correct and real interest rates were always 4 percent or if all bonds were variable interest rate bonds earning nominal interest at a rate calculated annually as 4 percentage points above the inflation rate. As a practical matter, bonds held in any given year earn widely different real interest rates. To be equivalent to rigorous indexing, the percentage inclusion rate would have to vary to reflect these differences, so no single annual inclusion rate could replicate or be as nondistortionary as rigorous indexing.

23 Mortgage interest, trade or business interest, and interest not itemized for tax purposes will not enter into this calculation. The maximum exclusion will be $450 (15 percent of $3,000 net interest) for single returns and $900 for joint returns. (Joint Committee on Taxation, General Explanation of the Economic Recovery Tax Act of 1981 (December 31, 1981), p. 194.)

24 For example, a single taxpayer who earned $1,000 of interest income and paid $600 of interest on consumer loans would be entitled to a $60 deduction (.15 x ($1,000 - $600) = $60), so that he would owe tax on $340, which is $1,000 of interest income minus $600 of interest deductions minus $60 of net interest exclusion. This is equivalent to

Market Adjustment

Lenders demand higher nominal interest rates when they anticipate inflation than when they anticipate stable prices, and borrowers are willing to pay the higher rates because they expect to repay their debts in dollars with less purchasing power.

Without income taxes, inflation should push up nominal interest rates one percentage point for each percent of anticipated inflation.[25] With an unindexed income tax, nominal interest rates would have to rise more than one percentage point for each percent of inflation to retain the same real after-tax interest rate, thus compensating both for inflation and for the extra tax on the higher nominal interest.[26]

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taxing 85 percent of the $1,000 interest income ($850) and allowing a deduction of only 85 percent of the $600 interest paid ($510), thereby taxing the same $340 ($850-$510 = $340).

25 For a good explanation of these market adjustments, see Tanzi, Inflation and the Personal Income Tax, pp. 107-117. Irving Fisher first predicted that nominal interest rates would rise in response to anticipated inflation, but he did not consider the effects of income taxes. (Irving Fisher, The Rate of Interest (1907), pp. 270-280). See also Michael Darby, "The Financial and Tax Effects of Monetary Policy on Interest Rates," Economic Inquiry (June 1975), pp. 271-273.

26 Suppose, for example, that all lenders and borrowers are taxed at a rate of 20 percent, and that the interest rate would be 4 percent if prices were expected to remain stable. In this case, the after-tax interest rate would be 3.2 percent (4 x (1-.2)). If inflation of 8 percent is suddenly universally anticipated, lenders will want to receive the same after-tax real rate of return of 3.2 percent, but in order to do so will need a pretax nominal interest rate of 14 percent. Borrowers will be willing to pay this higher rate, since it leaves their after-tax real borrowing costs unchanged (deducting the 14 percent interest reduces the effective borrowing cost to 11.2 percent (14 x (1 - .2) = 11.2), and subtracting the 8 percent inflation rate reduces it to 3.2 percent). Had the interest rate risen one percentage point for each percent of inflation, the new rate would have been 12 percent (8 + 4 = 12). The 14 percent rate is higher by enough to pay the extra tax on the inflation premium in the interest rate. In fact, in this special case, if the expected inflation of 8 percent materializes, the market adjustment leads to precisely the same after-tax real rates of interest as would prevail if interest income and expense were indexed.

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This "perfect" market adjustment would obviate the need for indexing interest income and expense, but it could occur only if all borrowers and lenders were taxed at the same rate and they correctly predicted the rate of inflation (or if all interest-bearing assets were indexed for inflation.)[27] The more progressive the income tax, the less the market could be expected to compensate for the lack of indexing. Even a partial market adjustment, however, would increase interest rates enough to compensate partly for the lack of indexation and effectively reduce somewhat the very high rates of tax on real interest income discussed above.[28] The examples cited in Table 14 and elsewhere in this section were all based on a percentage-point-for-percentage-point market adjustment and hence probably overstate somewhat the heavy taxation of lenders and tax subsidization of borrowers caused by the interaction of inflation with the tax system.[29] In any event, because tax rates are graduated and inflation is

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27 Even under these circumstances, inflation could affect the supply and demand for credit in other ways, so that the interest rate might rise by more or less than implied by the perfect market adjustment described above. (See Tanzi, Inflation and the Personal Income Tax, pp. 115-116).

28 Under a progressive income tax, the partial market adjustment predicted by economic theory would push up nominal interest rates by enough to leave middle-income lenders and borrowers with the same after-tax real interest rate that they faced before inflation and would face if indexing were in place. Higher-income taxpayers would face lower after-tax real interest rates than previously, and lower-income taxpayers would face higher after-tax real interest rates. Since some borrowers and lenders are tax exempt, even a proportional or flat-rate income tax would not establish a perfect market adjustment. (See Assa Birati and Alex Cukierman, "The Redistributive Effects of Inflation and of the Introduction of a Real Tax System in the U.S. Bond Market," Journal of Public Economics (1979), pp. 125-139).

29 A study of interest rates in the United States between 1952 and 1975 concluded that rates did not rise by enough to compensate for inflation and to offset the interaction of inflation and the tax system, even for middle-income investors. Although these results run counter to theory, they could be explained by taxpayers' unfamiliarity with inflation and its effects on the income tax. (See Vito Tanzi, "Inflationary Expectations, Economic Activity, Taxes, and Interest Rates," American Economic Review (March 1980), pp. 12-21). A more recent study of interest rates between 1959 and 1979 found evidence that the market had adjusted both for inflation and the interaction of the tax system with inflation. (Joe Peek, "Interest Rates, Income

often incorrectly anticipated, indexing would be needed to hold real tax rates on interest income to statutory rates.

Transitional Considerations

If indexation was imposed on interest on existing debt, taxes of those who were borrowers at the time of enactment would rise and taxes of lenders would fall. Indexation would allow borrowers to deduct only a portion of nominal interest payments during subsequent inflationary periods. This could cause hardship, since taxpayers who itemized deductions would be repaying debt that they incurred expecting to deduct all of their nominal interest payments.

Suppose, for instance, that a homeowner in the 30 percent bracket was paying 12 percent interest annually on a $50,000 mortgage when indexation was imposed. If the inflation rate was 8 percent the following year, the homeowner would deduct interest of $6,000 (.12 x $50,000) as usual but with indexation would have to declare as taxable income $4,000 (.08 x $50,000), the reduction in the real value of his $50,000 liability. Thus, his net deduction would be only $2,000 ($6,000 - $4,000) rather than the $6,000 that he had anticipated.

Although inflation would have benefitted the homeowner in the above example and other borrowers by lessening the real value of their debt, many taxpayers would not consider themselves to be any better off than previously, and they might not be able to capitalize on their gain to raise the money to pay the higher tax.

In addition, if interest rates have risen to higher levels than would have prevailed under tax base indexing, lenders have already in effect received some of the relief that would be provided by indexing, and borrowers have already in effect lost some of the advantage that they otherwise enjoy when the tax base is unindexed. Under these circumstances, therefore, it might be unfair to index interest income and expense on existing debt. Since the evidence suggests that a full market adjust-

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Taxes, and Anticipated Inflation," American Economic Review (December 1982), pp. 980-991). Another study found that inflationary expectations did not influence interest rates in the 1970s. (Lawrence Summers, "The Nonadjustment of Nominal Interest Rates: A Study of the Fisher Effect," National Bureau of Economic Research Working Paper #836 (January 1982)). Results of all of these studies are tentative, because they are based on assumptions about anticipated inflation rates which are necessarily unobservable.

ment has probably not taken place, however, this may not be a serious problem.[30] Moreover, it would not be a problem for indexing interest income and expense for future transactions.

Interest income and expense on existing debt could be exempted from indexation. In that case, however, taxpayers could manipulate their finances and attempt to classify new debts as "old debt" to avoid losing part of their interest deductions. At the same time, they could try to assign interest income to newly made investments to get the benefit of indexation.[31] Alternatively, to ease the transition, taxpayers could initially be allowed to continue deducting nominal interest in full up to the amount that they deducted in the year prior to enactment. This full deduction could then gradually be phased out over a number of years.[32]

DEPRECIATION

During inflation, unindexed depreciation deductions erode in value because they are spread over many years and are based on an initial (historical) cost expressed in the worth of currency at the date of purchase. The tax law allows a specified percentage of this nominal acquisition cost to be deducted each year until the asset is fully depreciated--that is, until the sum of the depreciation deductions equals the historical cost. If depreciation schedules are designed to approximate the annual declines in asset values that would occur with no inflation, owners would not be able to recover the real cost of plant and equipment during inflationary periods. Under these circumstances, the income tax would be partially a tax on capital.

Suppose, for instance, that an asset costs $100, loses one-tenth of its real value in each of the ten years of its physical life, and that tax law allows the owner to deduct one-tenth of the value each year. If depreciation deductions are not indexed for inflation, deductions of $10 ($100 x .10) are allowed each year. With inflation of 12 percent annually, the $10 depreciation deductions are less than the annual real loss in value.

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30 Moreover, if interest rates dropped upon enactment of tax-base indexing, borrowers could refinance at the more favorable terms--albeit usually only after paying substantial prepayment penalties.

31 See, for example, John Bossons, "Indexation after the Lortie Report," (Toronto: University of Toronto, Institute for Policy Analysis, November 1982), pp. 18-19.

32 Ibid.

Measured in the dollars prevailing at the end of the first year, for example, the initial cost of the asset is $112, rather than $100, so a loss of 10 percent of the initial value requires a deduction of $11.20 ($112 x .10), rather than $10.[33] Unless the owner is allowed to deduct $11.20 in the first year, the expenses of earning his income are understated, and his income is overstated.

Mechanics of Depreciation Indexing

Depreciation indexing would adjust annual depreciation deductions to reflect changes in the price level from year to year. Under current law, specified percentages of an asset's initial cost (its basis) are deducted each year until the full nominal cost has been deducted. Maintaining the real value of depreciation deductions during inflation would entail indexing the basis of each asset every year for the inflation that occurred in the previous year and then calculating depreciation deductions in the normal way. The basis for the current year would be determined by multiplying the basis for the previous year by the ratio of the current price level to the previous year's price level. In the above example, the value (basis) of the asset would have been updated to $112 ($112 = $100 x 1.12) before the first year's depreciation was calculated, so that a depreciation deduction of $11.20 would have been allowed. Gain on sale would be calculated by reference to the indexed adjusted basis, rather than the unindexed adjusted basis as under current law.[34]

An alternative method for indexing depreciation deductions would be to calculate the present value of the stream of depreciation deductions and allow that amount to be deducted in the year an asset is purchased.[35]

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33 This example is based on the assumption that tax is due at the end of the year.

34 Real gain on sale would be the difference between the sale price and the amount of the indexed purchase price that had not been depreciated. Taxpayers would calculate this undepreciated amount by referring to a table published by the IRS giving the percentage of the real initial purchase price that had already been taken in depreciation deductions. This percentage would depend on how many years the asset had been depreciated and the schedule of deductions that had been followed.

35 See Alan J. Auerbach and Dale W. Jorgenson, "Inflation-Proof Depreciation of Assets," Harvard Business Review (September-October 1980), pp. 113-118.

Constant Dollar vs. Current Cost Indexing. Two conceptually distinct approaches to indexing depreciation deductions for inflation--constant dollar and current cost--have been suggested. Constant dollar indexing of depreciation would adjust depreciation deductions to reflect changes in the general price level. It is the type of indexing just described and is the depreciation analog of the capital gains and interest income indexation described earlier in this chapter. Current-cost indexing of depreciation would base each year's depreciation on the current cost of purchasing each particular asset.[36] Current-cost indexing would represent a marked departure from standard tax accounting and would treat depreciable assets differently from other capital assets.[37] Moreover, it would pose practical

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36 For a good discussion of the differences between current-cost and constant-dollar indexing and the theoretical and practical strengths and weaknesses of the two approaches, see Arthur Young and Company, Financial Reporting and Changing Prices: A Survey of How 300 Companies Complied with FAS 33 (August 1980); and Financial Reporting and Changing Prices: A Survey of Preparers' Views and Practices (August 1981).

37 Traditionally, depreciation was intended to account for declines in asset values due to physical deterioration and, to a lesser extent, to obsolescence. Current-cost depreciation reflects changes in the current cost of purchasing an asset--changes brought about not only by deterioration and obsolescence, but by other factors as well, such as changes in the demand for and supply of the asset itself and the goods it is used to produce.

Under an income tax, in theory, owners of businesses should be taxed each year on changes in the real value of plant and equipment, no matter what the underlying cause. Whether a decrease in the real value of a machine is brought about by physical wear and tear, obsolescence, or a decrease in demand for the final product, the firm should subtract this decrease in real value from its receipts in calculating the income on which tax is due. Since this kind of accrual taxation requires annual valuation of all of the nation's plant and equipment, it is not administratively feasible. The tax system approximates it by allowing annual depreciation deductions and makes up for any errors caused by this approximation by taxing gain on sale. For tax purposes, the value of an asset at any point in time is considered to be its adjusted basis. If an asset is sold for more than its adjusted basis (for instance, if a fully depreciated asset is sold for any positive price), the tax system in effect recognizes that depreciation deductions exceeded the decline in the asset's value and charges tax on the difference between sale price and adjusted basis. (Continued)

problems, particularly for tax accounting, because of the difficulty of objectively determining current costs.[38]

Depreciation Schedule to Be Indexed

Any schedule of depreciation deductions can be indexed for inflation so that the real value of the deductions does not change with inflation, but, logically, indexation should be superimposed on the depreciation schedules that would be preferred in the absence of inflation. Since depreciation schedules have been accelerated since 1954 and were further liberalized in 1962, 1971, and 1981 in part to offset the effects of inflation, the Congress might want to revamp the entire depreciation system if it indexed the tax base.[39]

At rates of inflation now predicted for the next few years, the current depreciation system is more generous than a system of true

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Relative price changes like those reflected in current cost, but not constant-dollar depreciation indexing, occur for all assets, not only for depreciable assets. Since nondepreciable assets, such as land, are not afforded the accrual taxation that current-cost depreciation approximates, current-cost depreciation would make the taxation of depreciable assets unique. A study devoted to a comparison of current-cost and constant-dollar depreciation indexing concluded ". . . in absence of accrual accounting for all changes in value of assets, it will be found that depreciation based upon replacement cost leads to a worse measure of income than does depreciation adjusted for overall changes in the price level." (Eugene Steuerle, "Adjusting Depreciation for Price Changes," U.S. Department of Treasury, OTA Paper #37 (March 1979), p. 3.

38 Constant-dollar accounting is much more straightforward than current-cost accounting. For a discussion of some of the practical problems of implementing current-cost accounting and how companies have dealt with them, see Arthur Young and Company, Financial Reporting and Changing Prices: A Survey of Preparers' Views and Practices (August 1981).

39 The 1981 depreciation liberalizations were enacted primarily for three reasons: to simplify the calculation of depreciation, to encourage new capital investment, and to offset the effects of inflation on the real value of depreciation deductions. (See Joint Committee on Taxation, General Explanation of the Economic Recovery Tax Act of 1981, p. 75).

economic depreciation indexed for inflation. In other words, current law allows deductions exceeding real losses in asset values during the early years of ownership. Enacting a system of indexed economic depreciation based on the true decline in the value of plant and equipment would probably, therefore, raise income taxes for businesses.

PRODUCTION GOODS USED FROM INVENTORIES

When goods are always used in production in the year purchased, inflation does not seriously distort the measurement of the cost of these goods; when goods are purchased well in advance of their use, however, inventories accumulate and inflation causes problems. If the cost of the goods used in production is taken to be the nominal amount paid for them, the true cost of production is understated and consequently income is overstated and overtaxed.

Indexing inventories for inflation would require that purchase prices of goods be translated into the dollars prevailing at the time of their use in order to measure properly the real cost of the goods. For instance, if goods are purchased for $100 and used after two years of annual inflation of 10 percent, their cost should be counted for income tax purposes as $121 ($121 = $100 x 1.1 x 1.1), rather than $100.

Under current law, firms are not required to mark each item in inventory with its cost and date of purchase or to note precisely which items are used in production each year. Rather, they maintain ledgers listing the quantity and unit cost of inventory acquired at each date. When filing their tax returns, firms assign a cost to inventory used in production according either to the FIFO (first-in-first-out) or LIFO (last-in-first-out) approach. Under the FIFO approach, the goods used in production are assumed to have been the first put into inventory. Their cost is determined accordingly by reference to the cost of the oldest goods listed in the inventory ledger, and those goods are then scratched from the ledger. Under LIFO, the goods used are assumed to have been the last put into inventory. LIFO and FIFO produce the same results when all prices are stable.

Under FIFO, a longer time elapses between assumed acquisition and use of goods, so during inflationary periods the difference between the nominal and real value of the goods used in production is greater than under LIFO. As far as income tax accounting is concerned, the problems posed by not indexing inventories are, therefore, more acute when FIFO

accounting is used.[40] In fact, LIFO accounting roughly approximates replacement cost inflation indexing when inventories are not depleted--that is, when annual additions to inventory roughly equal the amount of inventory used in production.

During inflationary periods, constant-dollar FIFO accounting is superior even to LIFO accounting, because when inventories are being depleted and goods used in production have been in inventory a long time, even the use of LIFO accounting sharply understates the real cost of inputs. Moreover, goods in inventory could be appreciating in real terms relative to the general price level and, under LIFO accounting, that appreciation would go untaxed until the inventories were depleted. With FIFO accounting, firms are in essence taxed on the appreciation of their inventories; with constant-dollar (indexed) FIFO accounting, firms are taxed only on the real appreciation of their inventories.[41]

Indexing the cost of goods used in production would reduce taxable business income, and reduce it more for companies that use FIFO than for those that use LIFO. Table 15 illustrates how indexing the costs of production goods would have reduced the incomes of 209 companies in 1979.

CONCLUSION

Indexing the income tax base has much to recommend it in terms of improving the equity and efficiency of the income tax, but it would add complexity for taxpayers and the IRS.

The gains in equity and efficiency arise because only real income would be taxed. Effective tax rates exceeding 100 percent, sometimes

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40 For this reason, many firms now use LIFO inventory accounting, although many resisted changing from FIFO, both because LIFO understates the current value of inventories and worsens balance sheets and because FIFO reduces nominal income, making firms appear less profitable. If LIFO is used for tax purposes, it must be used also in financial reports to shareholders and in credit applications (I.R.C. § 472 (c)).

41 For an excellent explanation of the difference between LIFO and FIFO and of why FIFO recognizes inventory profits on accrual, see John Shoven and Jeremy Bulow, "Inflation Accounting and Nonfinancial Corporate Profits: Physical Assets," Brookings Papers on Economic Activity, vol. 3 (1975), pp. 584-590.

TABLE 15. EFFECT OF INDEXING COST OF GOODS USED IN PRODUCTION ON THE INCOMES OF COMPANIES USING LIFO AND FIFO IN 1979

Percentages by Which Indexed Income Is Lower than Nominal Income Because of Cost of Sales Indexation[a]	LIFO and Partial LIFO Companies[b] (In percents)	FIFO Companies[b] (In percents)
Over 100 percent lower	2	15
50-100 percent lower	6	9
10-50 percent lower	57	72
1-10 percent lower	25	4
No difference	10	0
Higher	0	0
Total	100	100

SOURCE: Arthur Young & Company, Financial Reporting and Changing Prices: A Survey of How 300 Companies Complied with FAS 33 (August 1980), p. 30.

a. Cost of sales are indexed using the constant dollar technique.

b. Sample includes 162 LIFO and partial-LIFO companies and 47 FIFO companies.

experienced under current law on real capital gains and interest income, would no longer occur. Nor would borrowing be subsidized. No longer would investment in certain industries or equipment (long-lived versus short-lived, capital intensive versus labor intensive, debt financed versus equity financed, for instance) be encouraged or discouraged simply by the interaction of inflation with the income tax. The Congress could determine how heavily it wanted to tax capital income compared to labor income and not have to be concerned that a change in the inflation rate would change the established relationship. Tax-base indexing superimposed on a neutral income tax with no preferences for saving and investment (one in which the statutory tax rate applied to all kinds of investment income) would improve the allocation of economic resources among investments.

With indexation, taxpayers would not know in advance what percentage of their nominal interest income would be taxable and what percentage of their nominal interest payments would be deductible. While their nominal tax rates would thus be more uncertain than currently, their real tax rates would not fluctuate as much with inflation as they do now.

In general, tax-base indexation might induce taxpayers to seek indexed wage contracts and interest-bearing securities in an attempt to achieve predictable real incomes and taxes. In the more completely indexed economy that could ensue, some inflation (such as that triggered by sudden increases in the price of imported oil) could be quickly transmitted throughout the economy.[42] Tax indexing itself, therefore, might fuel inflation. On the other hand, if tax-base indexing encouraged the use of indexed interest-bearing securities, the risks associated with unanticipated inflation would be reduced for lenders. Real interest rates might then drop and there might be more of a market for long-term debt.[43]

The cost of tax-base indexing in terms of added complexity is hard to assess. Since 1979, about 1,500 of the country's largest companies have been required to provide their stockholders supplementary income and

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42 For the arguments that indexing may itself be inflationary, see Arthur Okun, Prices and Quantities: A Macroeconomic Analysis (Washington, D.C.: The Brookings Institution, 1981), pp. 289-296.

43 See John Bossons, "Economic Effects of the Capital Gains Tax," Canadian Tax Journal (November-December 1981), pp. 819-820. Real interest rates on indexed securities might be as much as 2 percentage points below those on unindexed securities. (John Bossons, "Indexation After the Lortie Report," pp. 23-26.)

balance sheet data indexed for inflation.[44] For these companies, the mechanics of tax-base indexing would probably not be overly burdensome. For smaller companies and individual taxpayers with capital gain or

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[44] Financial Accounting Statement No. 33 (FAS 33), issued by the Financial Accounting Standards Board (FASB) in 1979, requires large firms (public companies with assets exceeding $1 billion or inventory, property, plant and equipment of more than $125 million) to provide supplementary inflation-adjusted balance sheet and income statement data. (Prior to 1979, the SEC required that companies registered with it provide annual data adjusted for inflation in a somewhat different manner. The SEC dropped its separate requirements when FAS 33 was issued.)

The inflation indexing of FAS 33 is more onerous and comprehensive than tax-base indexing would be. FAS 33 requires that the indexing be done two ways--using both the constant-dollar and current-cost techniques--and that it be done for some additional items beyond those required for tax-base indexing. Since only the relatively straightforward and more objective constant-dollar technique would be used for tax-base indexing, and since companies covered by FAS 33 have had several years to develop procedures for constant-dollar indexing, tax-base indexing would impose little additional burden on these companies. Other companies would face substantial compliance costs, particularly in the first year of tax indexing, but they could hire financial advisers who have worked with FAS 33.

FAS 33 was instituted for five years on a trial basis, after which the FASB plans to review its requirements based on experience with the current rules. Corporate management and the financial community have generally found current-cost accounting information more useful than constant-dollar information since it provides a better measure of real profits. (However, even current-cost data are not used extensively by corporate management for internal planning or by investment analysts.) The FASB might, therefore, decide to drop the constant-dollar requirements of FAS 33 and make permanent only the current-dollar requirements, although its decision might be influenced by enactment of tax-base indexing. Moreover, the FASB recently exempted companies with a significant part of their operations in foreign countries from some of the constant-dollar requirements of FAS 33.

For descriptions of FAS 33, its history, and results based on the first year's experience with it, see Peter Hart, "Accounting for Inflation in the United States," National Tax Journal (September 1980), pp. 247-255; and Arthur Young and Company (1980) and (1981).

interest income or deductions, tax-base indexing could be quite burdensome, and the IRS' job would be undeniably more difficult. This added complexity would be partly offset by any simplification derived from simultaneous repeal of tax preferences for capital income.

Should Base Indexing Be a Package Deal?

Opinion differs widely on the desirability of indexing only some tax-base items and of indexing the tax base without repealing the tax preferences for savings and investment. For instance, some argue only for enactment of provisions that would unambiguously reduce taxes.[45] Others argue that partial indexing is undesirable because of the opportunities it would create for tax avoidance. For instance, if only interest income and not interest expense were indexed, taxpayers would be able to profit by engaging in tax arbitrage--borrowing and deducting all of their nominal interest payments and lending the proceeds and paying tax only on part of the nominal interest received. Similarly, if capital gains were indexed and interest income and expense were not, taxpayers would be able to deduct more than their real interest expense but only have to pay tax on real capital gains.[46] This would implicitly reduce the tax rate on capital gains below the statutory rate.[47]

Most economists now favor base indexing only if applied to all base items and only if accompanied by repeal of the many tax incentives for saving and investment. As explained throughout this chapter, none of these tax incentives was enacted for the sole purpose of offsetting the effects of inflation, but several were enacted or expanded partly for that reason. Moreover, several were enacted to encourage investment generally--

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45 See, for example, John Mendenhall, "Tax Indexation for Business," National Tax Journal (September 1980), pp. 257-263.

46 Indexing capital gains alone would amount to a back door way of indexing depreciation and interest income. Because this indexing would apply only to depreciable and interest-bearing assets that generate capital gains (not to savings accounts, for instance), it would not be neutral in its effects. For a good explanation, see Department of Finance, "A Review of the Taxation of Capital Gains in Canada" (Ottawa, Canada, November 1980), pp. 40-44, 57-58.

47 The tax rate on some capital gains would even be negative. When there is no inflation, capital gains income is taxed more lightly than other income, since 60 percent of gain is excluded from taxable income.

investment that might have declined partly as a result of inflation's increasing the rate of tax on capital income.[48] To the extent that the tax incentives were enacted directly or indirectly to offset the effects of inflation, they might be repealed or scaled back if tax-base indexing is enacted. Since some of the savings and investment incentives might have been enacted for other reasons--to compensate for such shortcomings in the income tax as double taxation of corporate dividends, for example--the Congress might decide to retain them.

Revenue Effect and Distributional Consequences

The revenue effect and distributional consequences of tax-base indexing would depend on the other changes enacted at the same time and the subsequent rate of inflation. Tax-base indexing could conceivably have no effect on federal revenues if enough tax incentives for saving and investment were repealed simultaneously. Tax-base indexing superimposed on the current tax system, with its many tax preferences, would reduce federal revenues. Probably less revenue would be lost, however, if indexing was applied only to new assets.

The overall effect of inflation under a comprehensive income tax is to increase the tax burden on capital income, although the real tax burdens of individuals and businesses that borrow to finance capital investment can actually decline. If borrowers and lenders were in exactly the same tax bracket, indexation of interest income and expense would leave total revenues unchanged--the revenue lost by indexing interest income would be made up by that gained by indexing interest expense.[49] If net borrowers were in a higher tax bracket than net lenders, indexing would raise federal revenues; if borrowers were in a lower bracket, indexing would reduce revenues. In some cases, tax is not due on interest income (for instance, interest on pension fund and individual retirement account investments), although borrowers deduct the interest payments, while in other cases tax is collected on the interest paid on federal securities although there are no offsetting interest deductions. Thus, it is difficult to predict whether

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48 For a technical discussion of the negative effects on the economy caused by the interaction of inflation with the unindexed income tax in the 1960s and 1970s, see Martin Feldstein, Inflation, Tax Rules and Capital Formation (Chicago: University of Chicago Press, 1983).

49 These and other revenue effects discussed in this section refer to the net effect on corporate and individual income taxes combined.

indexing interest income would increase or decrease federal revenues.[50] Indexing the other tax base items--capital gains, depreciation, and inventories--would significantly reduce revenues. Since it is unlikely that indexing interest income and expense would raise revenues by more than indexing the other base items would reduce revenues, the net effect of indexing would be to reduce revenues.

Tax-base indexing superimposed on the current income tax would reduce taxes for individuals with capital gain and interest income but raise them for individuals (including many homeowners) who are net borrowers. Indexing the income tax base without making any other changes in the tax would benefit recipients of capital income, who tend to have high incomes.[51] Fifty-seven percent of all net capital income taxed at a positive rate in 1979 was earned by taxpayers with incomes above $50,000, and these taxpayers paid 83 percent of the total tax paid on capital income in that year, as shown in Table 16. If the Congress indexed the income tax base, it could make up the lost revenue and maintain the current distribution of the income tax by enacting a more steeply graduated rate schedule.

Overall, with indexation of the current tax, corporations would probably pay more tax in some years and less tax in other years than under current law, again depending on the course of future inflation. The largest corporations now prepare two sets of financial statements--unindexed and indexed--and a study of 300 of these companies found that indexed net

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50 A recent study concluded that borrowers are in higher tax brackets on average than lenders and therefore that indexing interest income and expense would raise taxes overall. This result is at variance with results of earlier work, and all results are tentative since they rely on strong simplifying assumptions about how capital markets work. (Mervyn King and Don Fullerton, eds., "The United States," in The Taxation of Income from Capital (Princeton: Woodrow Wilson School of Public and International Affairs, Princeton University, Discussion Paper #37, December 1982), Section 4.1.) Federal outlays would decrease if indexing caused interest rates to drop and thus reduced the cost of paying interest on the federal debt.

51 By the same token, failure to index the tax base hurts the same group. ". . . under the present [unindexed] income tax system, increases in inflation cause an increase in taxes that is in substance identical to a graduated tax on wealth." (John Bossons, "The Effect of Inflation-Induced Hidden Wealth Taxes," Proceedings of the 32nd Tax Conference, Canadian Tax Foundation (May 1981), pp. 18-19.)

TABLE 16. DISTRIBUTION OF INCOME FROM CAPITAL REPORTED AND TAXED ON INDIVIDUAL INCOME TAX RETURNS, BY INCOME LEVEL FOR 1979[a]

Expanded Income[b] (In thousands of dollars)	Total Income Tax		Net Income from Capital Taxed at a Positive Rate[c]		Tax on Capital Income[d]	
	(In billions of dollars)	Percentage Distribution	(In billions of dollars)	Percentage Distribution	(In billions of dollars)	Percentage Distribution
0-5	-0.2	---	0.0	0.0	-0.1	---
5-10	6.8	3.2	6.3	7.4	0.8	2.8
10-15	17.4	8.2	9.8	11.6	1.5	5.2
15-20	24.2	11.4	6.9	8.1	1.1	3.8
20-30	52.6	24.8	6.1	7.2	0.6	2.1
30-50	50.9	24.0	7.5	8.9	0.9	3.1
50-100	31.0	14.6	19.6	23.1	7.0	24.5
100-200	14.2	6.7	11.5	13.6	5.5	19.2
Over 200	15.7	7.4	17.0	20.1	11.2	39.2
Total[e]	212.5	100.0	84.7	100.0	28.6	100.0

SOURCE: Eugene Steuerle, "Is Income From Capital Subject to Individual Income Taxation?" Public Finance Quarterly (July 1982), p. 291.

a. Income from capital includes dividends and retained corporate earnings attributable to shareholders, net rental income, net interest income, and one-third of proprietors' income.

b. Expanded income is a broader concept of taxpayer income than adjusted gross income. In addition to adjusted gross income, it includes the excluded part of capital gains, percentage depletion in excess of cost depletion, and other tax preferences subject to the minimum tax. At the same time, it excludes the deduction of investment interest to the extent it exceeds investment income.

c. Income from capital minus deductions for interest, real estate taxes, and personal property taxes.

d. Difference between total tax collected and tax that would have been collected had the capital income not been subject to tax.

e. Details may not add to totals because of rounding.

income for 1979 was on average 96 percent of unindexed net income.[52] Although the total 1979 tax liability of these corporations taken together would therefore have dropped only slightly with tax-base indexing, companies in some industries would have received sizable tax cuts and others sizable increases.[53] Even within industries, some companies (those that rely heavily on debt financing) would have paid much more tax, while others would have paid much less.[54] Another study compared historical cost (unindexed) income (calculated using straight-line depreciation) to indexed replacement cost income for 136 companies over 1961-1980. In 13 of the 20 years studied, indexed income was less than unindexed income.[55]

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52 The corporations themselves do not calculate indexed net income, but they are required to provide data that can be used to construct income figures restated to reflect the constant-dollar indexation of depreciation, costs of production goods taken from inventory, and the purchasing power gain or loss on net monetary liabilities. Although this concept of restated net income does not correspond exactly to that of indexed taxable income, it can be used to get a rough idea of the implications of tax base indexing. Arthur Young & Company used the data supplied by 300 corporations to calculate net income restated for inflation in several different ways. The statistics reported in the text and in the following two footnotes are based on the restated income concept that corresponds most closely to indexed taxable income as described in this chapter. (For a description of the Arthur Young analysis, see Arthur Young & Company, Financial Reporting and Changing Prices: A Survey of How 300 Companies Complied with FAS 33 (1980), pp. 5-20. The statistics on restated net income are found in Appendix A (pp. 52-60) under column 8, "Constant Dollar Income from Continuing Operations Plus Purchasing Power Gain or Loss on Net Monetary Assets.")

53 For instance, the indexed net income of makers of office equipment was only 56 percent of unindexed net income, whereas the indexed net income of utilities (which are heavy borrowers) was 167 percent of unindexed net income. (Arthur Young & Company (1980), pp. 57, 60.)

54 Within the group of companies manufacturing motor vehicles and equipment, for example, indexed net income as a percentage of unindexed income ranged from negative 144 percent to positive 132 percent. (Arthur Young & Company (1980), p. 56.)

55 In 1964, 1965, 1975-1978, and 1980, indexed income was 7 to 13 percent below unindexed income. Differences between the two income measures were smaller in the other years. These data were prepared as background for Victor Bernard and Carla Hayn, "Inflation

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Two studies compared the 1977 total tax on corporate source income (tax owed by the corporations themselves on net income, their shareholders on dividends and capital gains, and bondholders on interest income) with the tax that would have been owed had the tax base been indexed for inflation. One found that the tax on corporate source income for 1977 was $32 billion more than what would have been due if the 1977 law had been unchanged except to require tax-base indexing. It found that the total effective tax rate on corporate-sector capital income was 66 percent in 1977, compared to the 41 percent tax rate that would have occurred had the tax base been indexed.[56] The other study found the extra tax for 1977 to be $21 billion and the total effective tax rate for 1977 to be 54 percent.[57] Another study found that for most years during 1946-1974, corporate taxable income was higher than real (indexed) income measured on accrual.[58]

Since tax-base indexing is extremely complicated and would add significantly to the burden of complying with and administering the income tax, at consistently very low rates of inflation the disadvantages of index-

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and the Magnitude and Distribution of the Corporate Income Tax Burden" (University of Michigan, June 1983).

56 Martin Feldstein and Lawrence Summers, "Inflation and the Taxation of Capital Income in the Corporate Sector," National Tax Journal (December 1979), p. 445.

57 Jane Gravelle, "Inflation and the Taxation of Capital Income In the Corporate Sector: A Comment," National Tax Journal (December 1980), pp. 481-482. Gravelle argued that both the Feldstein/Summers study and her study overstate the effects of inflation on raising tax burdens since the Congress enacted or expanded tax preferences for capital income to offset the effects of inflation. Since 1977, in fact, the Congress significantly reduced taxes on nominal capital income, so the effective tax rates cited in the text exceed current effective tax rates on capital income.

58 To calculate real accrual income, the authors adjusted national income account (NIA) income in several ways. They indexed straight-line depreciation, used constant-dollar FIFO inventory accounting, and added into income the real gain on net financial liabilities. (John Shoven and Jeremy Bulow, "Inflation Accounting and Nonfinancial Corporate Profits: Financial Assets and Liabilities," in Brookings Papers on Economic Activity, 1:1976, pp. 39-42.)

ation could outweigh its advantages and recommend against it.[59] On the other hand, many years of even relatively low inflation can seriously distort the measurement of real income. Moreover, high rates of inflation can arise unexpectedly, and when inflation is worse than anticipated, as in the late 1970s, an unindexed tax base can cause serious problems.

Even within the economics profession, there is wide disagreement as to whether base indexation is desirable on balance. Many economists now advocate indexing the income tax base, in spite of the complexity of doing so, but some also favor repealing the current savings and investment tax incentives so that tax would be imposed on the closest practical approximation to real economic income. Others believe that the complexity of indexing plus the serious distortions that result if the base is not indexed provide compelling reasons to abandon income as the tax base and to tax consumption instead. (This approach is discussed in Chapter VI.) Yet others oppose indexing, because of its complexity and out of concern that it would fuel inflation or be enacted without repeal of the current tax preferences for saving and investment, leaving the income tax with more distortions overall than it currently contains.

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59 Of course, opinions differ as to what rate of inflation would justify base indexation. Economist Martin Bailey advocated base indexing if inflation is expected to remain above 5 percent a year, and occasionally exceed 10 percent a year. (Martin Bailey, "Inflationary Distortions and Taxes," in Henry Aaron, ed., Inflation and the Income Tax, p. 316.) Even if inflation subsides or prices become stable, the effects of previous inflation continue to be felt for many years in depreciation, capital gains, and inventory accounting. (See T. Nicolaus Tideman and Donald Tucker, "The Tax Treatment of Business Profits under Inflationary Conditions," in Inflation and the Income Tax, pp. 33-80.)

CHAPTER VI. TAXING CONSUMPTION INSTEAD OF INCOME

Instead of encouraging private saving by selectively reducing or eliminating taxes on certain forms of saving, or by introducing the complexities of tax-base indexing for capital income, the Congress could do so in a comprehensive and uniform way by exempting all saving from taxation. Because disposable income must necessarily be put to one of two uses--either spending or saving--an income tax with a deduction for saving is a tax on consumption.[1] In fact, because much saving is currently exempt from tax, the current tax is not a pure tax on income but rather a hybrid tax, with some characteristics of an income tax and some of a consumption tax.[2]

This chapter describes briefly how a consumption tax would work, the arguments made for and against it, some of the problems in moving from an income to a consumption tax, and the possible effects of a consumption tax on the distribution of tax burdens.[3]

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1 Under this dichotomy, taxes and gifts must be categorized as either consumption or saving.

2 As explained below, under a pure consumption tax, tax would be due on borrowed amounts (and interest and principal payments would be deductible). The current tax differs from a consumption tax in this important respect. Some say that the steps that have already been taken in moving toward a consumption tax are the politically easier steps of exempting much saving from tax, while it may be much more difficult to obtain the political support needed to tax borrowing. For a technical analysis characterizing the current tax as a hybrid tax and describing problems with this halfway house approach, see David Bradford, "The Economics of Tax Policy Toward Savings," in George von Furstenberg, ed., The Goverment and Capital Formation (1980), pp. 38-50.

3 For more in-depth analysis of consumption taxation, see Department of the Treasury, Blueprints for Basic Tax Reform (January 17, 1977); Joseph Pechman, ed., What Should be Taxed: Income or Expenditure? (The Brookings Institution, 1980); Institute for Fiscal Studies, The Structure and Reform of Direct Taxation (1978) (called British Meade Committee Report); William Andrews, "A Consumption-Type or Cash Flow Personal Income Tax," 87 Harvard Law Review (April 1974),

History of Interest in a Consumption Tax. John Stuart Mill, Thomas Hobbes, Alfred Marshall, and Irving Fisher, among others, advocated taxing consumption rather than income.[4] Irving Fisher, for instance, felt that saving should not be taxed because it is only a means to achieve the ultimate objective of delayed consumption. By this reasoning, an income tax is unfair because it taxes saving twice. More recently, Nicholas Kaldor argued for a supplementary consumption tax in order to tax the excessive spending of the wealthy.[5] In the late 1970s, the governments of Great Britain and Sweden, and the Department of the Treasury in the United States all published comprehensive studies exploring the desirability and feasibility of a consumption tax.[6]

In spite of much academic interest, however, only two countries, India and Sri Lanka, have enacted consumption taxes.[7] In both cases, the taxes supplemented income taxes and were repealed shortly after enact-

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pp. 1113-1188; Alan Gunn, "The Case for an Income Tax," University of Chicago Law Review (Winter 1979), pp. 370-400; Statement of David F. Bradford before the Subcommittee on Monetary and Fiscal Policy of the Joint Economic Committee (August 19, 1982); David Bradford, "The Economics of Tax Policy Toward Savings," pp. 11-71; Committee on Simplification, Section of Taxation, American Bar Association, "Complexity and the Personal Consumption Tax," Tax Lawyer (Winter 1982), pp. 415-442.

4 John Stuart Mill, Principles of Political Economy (Clifton, New Jersey: Augustus M. Kelley reprint, 1973), Book V., Chapter II, Section 4; Thomas Hobbes, Leviathan (London, England: J.M. Dent & Sons reprint, 1934), p. 184; Alfred Marshall, "The Equitable Distribution of Taxation," in A. Pigou, ed., Memorials of Alfred Marshall (1925), pp. 347, 350-351; Irving Fisher and Herbert Fisher, Constructive Income Taxation: A Proposal for Reform (New York: Harper, 1942).

5 Nicholas Kaldor, An Expenditure Tax (Westport, Conn.: Greenwood Press, 1977).

6 Institute for Fiscal Studies, The Structure and Reform of Direct Taxation; Sven-Olof Lodin, Progressive Expenditure Tax: An Alternative?, A Report of the 1972 Government Commission on Taxation (Stockholm: Liber Forlag, 1978); Department of the Treasury, Blueprints for Basic Tax Reform.

7 See Richard Goode, "The Superiority of the Income Tax," in Joseph Pechman, ed., What Should Be Taxed: Income or Expenditure?, pp. 50 and 71.

ment. Consumption taxation has recently attracted attention in the United States following press reports that Martin Feldstein, Chairman of the Council of Economic Advisors, favors this kind of tax.[8]

MECHANICS OF A CONSUMPTION TAX

Cash-Flow Approach

A consumption tax which uses a cash-flow approach to taxation would be collected in much the same way as the current individual income tax. Each taxpayer would report all spendable cash received during the year, including wages and salaries, gross business receipts, dividends, interest, rents, borrowed money, and proceeds from sales of assets. He would then subtract amounts saved, including money deposited into savings accounts, purchases of stocks, bonds and income-producing assets, repayments of debt, and so forth, from these receipts. He would be taxed on the remainder, which is his consumption. This system is similar in broad outline to the way in which deposits to Individual Retirement Accounts (IRAs) are now treated--contributions are deductible when deposited but contributions and accumulated earnings are taxed upon withdrawal.

Despite the basic similarity to the current system of Individual Retirement Accounts, a true consumption tax would differ significantly, both in terms of the savings that would be deductible for tax purposes and the receipts that would be taxable. All forms of saving would be deductible, without limit. While the actual definition of saving would be an issue (particularly as to the inclusion or exclusion of collectibles such as antiques and jewelry), it would certainly include purchases of stocks and bonds, investments in businesses, and repayments of prior debt. There would be none of the current restrictions governing IRAs, such as ceilings on annual contributions or requirements that assets be held until retirement. Withdrawals could be made in any amount at any time and for any purpose, at which time they would be taxed unless reinvested.

On the other side of the coin, the definition of taxable receipts would be correspondingly broadened. All receipts of spendable cash would be taxed (unless they were saved). This would include the entire proceeds of sales of capital assets, instead of only the capital gains. Further, since borrowed amounts are available for spending, they would have to be included in the tax base, or else consumption would be understated. If an investor borrowed a sum of money and saved it, the deduction for saving

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8 "Why Washington Likes Consumption Taxes," Business Week (June 13, 1983), p. 80.

would offset the inclusion of the borrowing in the tax base, so there would be no net tax consequences. If the borrowed amount was not saved, it would have been spent and hence properly taxable. Unless borrowing was included in taxable receipts, taxpayers could omit the borrowing from their receipts and then take the deduction for saving the borrowed money, thereby obtaining potentially unlimited tax deductions for simply borrowing and lending.

As an example to compare a simple income tax with a simple consumption tax, suppose a taxpayer received in cash $20,000 in wages, $500 in interest, and $500 in dividends, for a total income of $21,000 in one year, and then invested $1,500 in bonds. Under a simple income tax with no exclusions and a flat-tax rate of 20 percent, the taxpayer would owe tax of 20 percent on the full $21,000 of income, for a total tax of $4,200. Under a similarly simple consumption tax, tax would be due on $19,500, which is the $21,000 of income, less the $1,500 saved. A 20 percent tax would yield consumption tax revenue of $3,900, for a federal revenue loss of $300. A 21.5 percent tax on $19,500 would be necessary to raise tax revenue of $4,200, the same amount as raised by the 20 percent income tax on $21,000. This consumption tax, then, would leave $15,300 available for actual consumption ($21,000 -$1,500 - $4,200 = $15,300).

Optional Prepayment Approach

The staff of the Treasury Department suggested in 1977 an optional tax accounting treatment to the so-called cash-flow approach just described.[9] Instead of allowing tax deductions for additions to saving and taxing in full withdrawals from saving, the alternate "prepayment" approach would ignore both ends of the transactions. No deduction would be allowed for new savings, and no tax would be due when savings and interest were withdrawn and consumed. (In effect, the tax due had been prepaid--hence the name of this approach.)

Under some circumstances, described below, the tax due on investment income would be the same under the two approaches, and giving taxpayers their choice of method would have some advantages. Tax accounting is clearly simplified if all transactions are ignored; taxpayers have the privacy of not having to divulge their holdings; and under a

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9 For complete discussions of the pros and cons of this optional treatment, see Department of the Treasury, Blueprints for Basic Tax Reform, pp. 122-131; and Michael Graetz, "Expenditure Tax Design," in Joseph Pechman, ed., What Should Be Taxed: Income or Expenditure?, pp. 167-182.

progressive rate structure taxpayers can essentially average their own taxes by judiciously selecting the type of treatment for different assets.

On the other hand, the optional treatment has come under attack because it shifts the perspective of the tax to one of opportunities rather than outcomes. Under the prepayment approach, tax would be effectively paid at the time of investment, since no deduction is allowed for the investment. If the discounted stream of returned equalled the price paid for the asset, this prepaid tax would equal the tax that would have been paid under the cash-flow approach. If an investor turned out to be lucky or had some reason to know that an investment would be extraordinarily good, the tax he would pay under the prepayment approach would turn out to be less than he would have paid under the cash-flow approach, which assesses tax on the basis of the actual after-the-fact yield of an investment. Thus, those who believe that tax should be assessed on the basis of outcomes rather than opportunities generally reject full optional prepayment treatment.[10] As explained below, however, they sometimes recommend prescribed prepayment treatment for the taxation of consumer durables, because returns from consumer durables (except housing) are quite predictable and small.

Tax Exemption of the Return to Saving

The return to most saving would not be taxed under a consumption tax. Investment returns would clearly be exempt from tax under the prepayment approach. Although no deduction would be allowed for the original investment, no tax would be due on either the yield or the original investment amount when withdrawn. Under the conditions for which the cash-flow and prepayment approaches are equivalent (see preceding paragraph), therefore, the return to saving would not be taxed under the cash-flow approach, either.

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10 Full optional treatment is also open to some tax manipulation, which would have to be carefully policed (just as some income is now reviewed for tax manipulation). Moreover, the equivalence between the two approaches breaks down when the Congress changes tax rates over the course of time or if bequests are not taxed as consumption of the deceased. The self-employed would have to be required to use the cash-flow approach; otherwise, they could elect prepayment treatment and avoid tax on their labor income by paying themselves minimal wages and having prepaid tax on unusually high profits.

Similarity to a Wage Tax

Since the return to most saving would essentially be tax free under a consumption tax, a consumption tax is sometimes likened to a tax on wages. Only under a restrictive set of conditions, however, is a consumption tax equivalent to a wage tax.[11] Unless the return to wealth held on the enactment date was exempted from tax, the base of a consumption tax would exceed the base of a wage tax. Moreover, an individual's annual tax payments would be the same under the two taxes only if by coincidence his income from capital equalled his net saving in that year. (Under certain circumstances, however, the present value of the stream of his lifetime tax payments would be the same under the two taxes.)

Similarity to a Sales Tax

When most people first learn about a consumption tax and how it would work, they think of it as a sales tax. In the above example, for instance, a 27.5 percent sales tax on final consumption goods and services would yield the same revenue and influence behavior in the same way as the consumption tax, with less administrative burden.[12] A sales tax could thus readily be substituted for a flat-rate consumption tax, but it would be far easier to structure a consumption tax to make it progressive and to grant low-income relief, to allow for differences in family size and circumstances, and to allow for tax averaging and special subsidies now delivered through the tax system.

FAIRNESS AND ECONOMIC EFFICIENCY

Whether income or consumption is a fairer base for taxation is widely debated. Some analysts feel that income is a better indicator of ability to pay tax, because all income represents power to consume or save. According to this school of thought, whether income is in fact saved or spent is immaterial; all of income could potentially be consumed, and it is

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11 The conditions necessary for equivalence are enumerated in Graetz, "Expenditure Tax Design," pp. 172-173.

12 In the above example, the $4,200 tax is 27.5 percent of actual consumption ($15,300). The two consumption tax rates are equivalent but expressed differently. The 21.5 percent rate is calculated on a base that includes both consumption and taxes. This is called the gross or inclusive tax rate and corresponds to the familiar concept of income tax rates. The 27.5 percent rate is calculated on after-tax consumption and is called the net or tax-exclusive rate.

the power to consume, not the consumption itself, that is the appropriate basis for taxation.

Others think that lifetime income is the appropriate base for taxation, measuring as it does the total capacity to consume. This group holds that annual consumption is a better proxy for average lifetime income than is annual income. According to this view, although incomes rise and fall, individuals try to smooth out their consumption over their lifetimes, borrowing in youth, saving in mid-life and drawing from their savings in retirement. Taxing these relatively smooth consumption streams would approximate taxing individuals' expected lifetime incomes.

Yet other analysts feel that it is fairer to tax consumption than income. They base their reasoning on several considerations: individuals should be taxed on what they withdraw from the common pool, not what they contribute; consumption is a better measure of ability to pay tax; or it is unfair to tax saving twice--once when earned initially and again when savings have earned interest.

Since consumption is usually greatest relative to income during youth and retirement, most people would pay more tax during those years and less during middle age under a consumption tax than under an income tax. Essentially a consumption tax is geared to a longer-run perspective of economic well-being.[13] Students with low incomes attending professional schools, for instance, who borrow for present consumption in anticipation of high future earnings, would be taxed at a higher rate during their youth under a consumption tax than under an income tax. Since people like these students are arguably better off than people of the same current income with no prospect of higher future incomes, some feel that the students should pay the higher tax that they would owe under a consumption tax.

Under a proportional consumption tax, the same amount of tax is collected from individuals with equal initial wealth and lifetime incomes, regardless of when they spend their money.[14] An income tax, by contrast,

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13 Income averaging can reduce the heavy taxation that otherwise occurs under a progressive income tax for people whose year-to-year incomes fluctuate widely. Averaging of an individual's income over many years is probably not feasible, however, for it would entail excessive recordkeeping. The choice is, therefore, between short-term income averaging and consumption as an imperfect measure of long-term income.

14 This holds true only if they earn the same return on their savings and give the same gifts and inheritances (or if gifts and inheritances are

even if proportional, taxes more heavily the person who saves to consume later in life than the person who spends early in life.

On economic efficiency grounds, arguments can be made for and against a consumption tax. Because a consumption tax does not tax saving, it does not distort the tradeoff between present and future consumption--that is, the after-tax rate of return to saving is the same as the before-tax rate of return. For example, suppose that the market interest rate is 10 percent and an individual has income of $100, which he can save or consume. If there were no taxes at all, his choice would be between $100 of consumption this year and $110 next year. Under a consumption tax of 50 percent (gross rate), he could consume $50 ($100 x .50) in the first year (and save nothing), or he could consume nothing in the first year, save $100 and consume $55 ($110 x .50) in the second year. The relative tradeoff between present and future consumption--a dollar of consumption in the first year versus $1.10 in the second--would thus be preserved under a consumption tax ($50 x 1.10 = $55). By contrast, under an income tax a dollar of consumption forgone in the first year would provide less than $1.10 consumption in the second year.[15] A consumption tax would thus lead to a gain in economic efficiency, because saving would not be discouraged as it is under an income tax. Most likely this would lead to a higher saving rate.[16]

Under current law, some kinds of investment and saving receive preferential tax treatment, so that tax rates on capital income vary widely. The economic distortions that result would not exist under a pure consumption tax, since the tax rate on all saving would be zero. This is a major advantage of a pure consumption tax.

On the other hand, much of the potential gain in economic efficiency from an idealized consumption tax would be lost if the Congress enacted

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taxed as consumption of the donor). It is not true of a progressive consumption tax (with graduated rates or low-income relief or both).

15 Under a 50 percent income tax, the tradeoff is between $50 ($100 x .50) in the first year and $52.50 ($50 x (1 + (.1)(.50))) in the second year.

16 As explained in Chapter IV, in theory an increase in the after-tax rate of return to saving may lead either to more or less saving. Although it would probably lead to more saving, no one is quite sure how much more, and additional domestic saving may flow abroad and therefore not result in additional domestic investment in plant and equipment and increased domestic productivity.

additional savings incentives or special tax breaks for investments in certain activities, or exempted from tax certain kinds of consumption, such as housing or political contributions. In addition, because the base of a comprehensive consumption tax would be smaller than the base of a comprehensive income tax, the average rate of a consumption tax would have to exceed somewhat that of a comparable income tax in order to raise equal revenue.[17] A consumption tax, therefore, would increase the rate of tax on wages and salaries spent on current consumption and impose greater distortions than an income tax on the choice between leisure and working to purchase current consumption goods and between untaxed fringe benefits and taxable consumption.[18]

Several new studies suggest that economic welfare would increase overall as a result of a change from income to consumption taxation.[19]

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17 The rate of a proportional (flat-rate with no exemptions) consumption tax, for instance, would probably have to be between 5 and 10 percent higher than the rate of a proportional income tax, since about 5 to 10 percent of total personal income is saved. According to the Treasury Department, a 14 percent proportional consumption tax with no exemptions or deductions would raise the same amount of revenue as the current individual and corporate income taxes combined. It estimates that the same revenue would be raised from a 13 percent proportional uniform income tax which integrated a comprehensive individual income tax and the corporate income tax with no exemptions or deductions. (John Chapoton, Assistant Secretary of the Treasury for Tax Policy, Testimony before the Senate Finance Committee (September 28, 1982), p. 4.)

18 The rate of tax on wages and salaries put into saving would drop to zero under a consumption tax.

19 Alan Auerbach, Laurence Kotlikoff, and Jonathan Skinner, "The Efficiency Gains from Dynamic Tax Reform," Harvard Institute of Economic Research Discussion Paper No. 870 (December 1981); Don Fullerton, John Shoven, and John Whalley, "Replacing the U.S. Income Tax with a Progressive Consumption Tax: A Sequenced General Equilibrium Approach," National Bureau of Economic Research Working Paper No. 892 (May 1982). Fullerton, Shoven, and Whalley calculate the welfare effects of moving from the current income tax, which they characterize as a hybrid consumption/income tax since about half of saving is currently exempt from tax, to eight alternate tax systems. They range from a pure income tax with integration of the corporate and individual taxes, to a pure income tax without integration, to income taxes with varying percentages of saving

Another study came up with roughly the same result for a model of the United States in isolation, but when the model was adapted to allow foreigners to invest in the United States and Americans to invest abroad, a move to a consumption tax was found to decrease American welfare overall.[20]

OTHER ADVANTAGES AND DISADVANTAGES OF A CONSUMPTION TAX

A consumption tax would solve some of the most difficult problems with the current income tax, neither help nor hinder others, and create some new problems of its own.

Integration of Corporate and Individual Taxes

A true consumption tax would in and of itself resolve the issue of integration of the individual and corporate taxes by eliminating the corporate tax. Individuals would deduct investments in corporate stock and be taxed on all earnings from the stock. Distributed dividends would be

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exempt from tax, to consumption taxes with and without integration, and with and without subsidies for housing. Moving from the present system further toward a consumption tax (by exempting more and more saving from tax) improves welfare, with the greatest improvement coming from the pure consumption tax coupled with repeal of the corporate tax (equivalent to a one-time cash grant to the country of about $1.3 trillion, or 2.7 percent of the discounted present value of all future national income). Although welfare drops in the first years following enactment of a consumption tax, welfare increases enough in later years to more than make up for the drops in the first years, so that from a long-term perspective the welfare (in discounted present value terms) of households in all income groups increases.

20 Saving by Americans would increase upon enactment of a consumption tax, driving down the before-tax rate of return to investment in the United States and as a result reducing investment in the United States by foreigners. Some of the increased saving by Americans would be invested abroad. (Lawrence Goulder, John Shoven, and John Whalley, "Domestic Tax Policy and the Foreign Sector: The Importance of Alternative Foreign Sector Formulations to Results from a General Equilibrium Tax Analysis Model," paper presented at the National Bureau of Economic Research Tax Simulation Conference (January 1981).)

taxed unless reinvested by stockholders, and retained earnings would be reflected in higher stock prices and hence taxed in full upon sale of the stock for consumption. Abolition of the corporate tax would eliminate the double tax on dividends and thus end both the present tax discrimination against incorporated businesses and the current bias favoring debt rather than equity financing. Corporate income would be taxed only once and at the rate applying to the stockholder who was the ultimate beneficiary of the income, rather than to the corporation.

Although complete integration of corporate and individual taxes has long been considered desirable by many economists, it has never been implemented, partly because of the administrative difficulty of doing so within the framework of a graduated-rate income tax. On the other hand, some feel that a separate corporate income tax should be retained as a tax on the privilege of doing business as a corporation with limited liability or because the corporate tax makes the overall tax system more progressive.[21] Any degree of progressivity can be achieved instead through graduation of the rates of a consumption tax, however. If the corporate income tax was abolished, not only would the tax rates on consumption have to be high enough to generate the revenue of both the individual and corporate income taxes, but the top marginal rates would also have to be quite high to replicate the current degree of progressivity.

If the corporate tax was retained, it could be kept in its present form, but instead it would probably be fashioned after the consumption tax treatment of self-employed business income. Tax would be imposed on all cash received from the sale of goods and services, less the cost of all labor and other inputs purchased during the year. Expenditures on plant and equipment would be deducted (expensed) in full in the year of purchase, rather than depreciated, and the full proceeds of the sale of plant and equipment would be taxed. Similarly, the full cost of production inputs would be deducted in the year purchased, making it unnecessary to keep track of inventories of these items for tax purposes as is done now.

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21 Arguments for retaining a corporate income tax are presented in Richard Goode, "The Superiority of the Income Tax," pp. 66-67; The Institute for Fiscal Studies, The Structure and Reform of Direct Taxation, pp. 227-258; and Paul McDaniel's comments in What Should be Taxed: Income or Expenditure?, pp. 291-292. Repeal of the corporate income tax in this context is advocated by: Department of the Treasury, Blueprints for Basic Tax Reform, p. 133; Testimony of John Chapoton before the Senate Finance Committee (September 28, 1982), p. 19; and David Bradford, Statement before the Joint Economic Committee (August 19, 1982), pp. 15-16.

Resolution of Some Accounting Problems

If the corporate income tax was eliminated, there would be no need for corporate tax accounting. Moreover, the self-employed would deduct costs of goods, plant, and equipment in the year purchased, so the difficult problems of accounting for depreciation and inventories under an income tax would no longer exist.[22] Defining and measuring capital gains would no longer be a problem, since proceeds from the sale of all assets would properly be included in full in the tax base. Therefore, taxpayers would no longer have to keep records over many years of prices paid for assets. Moreover, it would be unnecessary to attempt or approximate accrual taxation of capital gains.

As discussed in Chapter III, pension income (and to a more limited extent life insurance earnings) is afforded favorable tax treatment under current law, partly because it is so difficult to determine the extent of an individual's claims prior to distribution. The appropriate treatment of life insurance and pension income under a consumption tax is easy to implement and no different from that of other investments: full deductibility of contributions and full taxability of withdrawals and distributions.[23]

Accounting for Inflation. As discussed in the last chapter, making the necessary accounting adjustments to index an income tax fully for inflation is extremely complicated. These inflation accounting problems would not be at issue under a consumption tax, because all tax accounting would be done on a current basis--that is, consumption would be measured in current dollars each year as the difference between cash inflow and cash devoted to saving.[24] Like investments in stocks and bonds, capital

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22 So as not to discriminate against investment in education, tuition, and other educational fees should also be immediately deductible under a consumption tax, just as they should be capitalized and deducted over a number of years under an income tax. In both cases, however, education expenses should in theory not be deductible if they are made solely for enjoyment rather than to increase a person's earning potential.

23 The appropriate consumption tax treatment of life insurance proceeds is part of the larger question of the taxation of gifts and bequests. This is as complicated an issue for a consumption tax as for an income tax. It is discussed thoroughly in Graetz, "Expenditure Tax Design," pp. 200-207.

24 To avoid bracket creep under a consumption tax, however, it would be necessary to take the relatively simple steps needed to index bracket

purchases would be deducted in the year made (expensed, rather than depreciated). Proceeds from sales of appreciated assets would be included in full in the tax base, with no adjustment for inflation-induced nominal gains, because their potential consumption value would be measured by the purchasing power of the dollar prevailing at the time of sale.[25]

Existing Problems Not Solved by a Consumption Tax

Certain problems with the income tax--such as the inherent difficulties of choosing the unit of taxation (family or individual), and of taxing fringe benefits and the consumption made possible through nonmarket work and poor tax compliance in certain areas--would remain under a consumption tax. In fact, compliance could worsen. Individuals would stand to gain more from some noncompliance, since if they did not report the sale of assets, they would avoid tax on the full proceeds, rather than on just the capital gains.

The tendency of the Congress to enact special tax incentives and preferences might not abate, and in addition there would be new pressure brought to bear to exclude certain kinds of consumption from taxation.[26]

Taxation of Consumer Durables. The theoretically correct tax treatment of consumer durables, most notably owner-occupied housing, would be somewhat easier to implement under a consumption tax than under an income tax. As explained in previous chapters, the current tax preferences for owner-occupied housing have caused overinvestment in housing. Taxing the consumption from housing would put investment in

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widths and personal exemption and standard deduction amounts.

25 If an individual wanted to maintain the real value of his capital, he would have to reinvest (and deduct) the portion of his nominal return that represented the inflation premium.

26 Since consumption is included in the base of an income tax, similar pressures are brought to bear to exclude certain kinds of consumption from income taxation. Under the current tax, for instance, large medical expenses, moving expenses, and political contributions are deductible or allowed tax credits. When India and Sri Lanka enacted consumption taxes, they allowed exemptions for many kinds of consumption, including political campaign, marriage, and funeral expenses. (Nicholas Kaldor's comments in What Should Be Taxed: Income or Expenditure?, p. 156.)

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housing on an equal footing with other types of investment and hence the allocation of economic resources. At the same time, of course, it would increase the taxes of homeowners. There might, therefore, be support for exempting housing expenses from a consumption tax.

Under a pure consumption tax, the purchase of a house would be treated just like any other investment. The price of the house would be deductible in the year of purchase, and the imputed or implicit rental value, net of expenses, included in receipts during each year of ownership, along with the full sale proceeds in the last year.[27] The amount of tax that would be collected under this cash flow approach could, however, be roughly approximated by ignoring the transaction altogether, as in the so-called prepayment approach described above. In this way, the practical and political problems of imputing rental values would be avoided.

Under the prepayment approach, the tax deduction for the initial house purchase would be denied and the imputed consumption and the sale proceeds would not be taxed.[28] So as not to impose an enormous tax liability on most homeowners in the year of home purchase, the prepayment approach would have to be carried through to the tax treatment of mortgages. Rather than including the entire mortgage in receipts in the year of purchase (and allowing deductions for mortgage interest and principal payments), the mortgage proceeds would not be taxed, but no deductions would be allowed for payments of mortgage interest and principal.

As an example of the prepayment approach, suppose that a couple bought a house for $80,000 with a 20 percent downpayment of $16,000 and a 30-year, 15 percent mortgage for the remaining $64,000. Because under this approach the loan amount would not be included in receipts and the house purchase price would not be deductible, in the first year the couple would be taxed on the $16,000 downpayment, which is the cash spent but

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27 The deduction for the price of a house in the year of purchase would often be offset partly by inclusion of the full amount of the mortgage in the tax base in that year. Nevertheless, some taxpayers would have such a large net deduction in that year that their taxable consumption would be reduced below zero. The Congress could permit taxpayers to carry forward unused deductions to future years.

28 The prepayment approach departs significantly from the cash-flow approach if a homeowner's tax rate changes greatly during his ownership tenure--either because of a progressive rate schedule or because of legislated rate changes--or if housing prices rise or fall substantially counter to general expectations.

not allowed to be deducted. In future years, the $9,766 annual payment of mortgage interest and principal would similarly be taxed as cash spent but not allowed to be deducted. The sale proceeds would not be included in receipts, and no deduction would be allowed for retiring the outstanding mortgage. If the house was sold five years later for $90,000, for instance, the $27,117 received in cash after paying off the remaining mortgage would all be available for consumption without any tax due on it at that time. (In effect, the tax due had been prepaid.)[29]

IMPLEMENTATION PROBLEMS

The most difficult problems in implementing a consumption tax would stem from the transition from an income to a consumption tax, the international complications of changing the U.S. tax system, and the potential for greater concentration of wealth.

Problems of Transition

One serious question in moving to a consumption tax from the current income tax is how to treat consumption from wealth existing on the date of enactment, when that wealth had been accumulated from income that might have been fully taxed, partially taxed, or not taxed at all under the income tax. Wealth accumulated out of pretax dollars, such as that in individual retirement accounts, poses no problem, since it would be treated in basically the same way under a consumption tax as under the current income tax: it would be taxed in full upon withdrawal for consumption.

There are two basic approaches to dealing with wealth accumulated out of income that had been taxed under the income tax.[30] Under the first approach, called the "prepaid" approach, consumption from wealth held on the date of enactment of the new tax would go untaxed. Since much

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29 Some advocate taxing the real gain on housing in this context, as an ad hoc correction for the prepayment approach's intrinsic failure to measure properly consumption during periods of unexpected relative price changes. In this example, assuming there had been no inflation, this would entail taxing the $10,000 difference between sale and purchase price.

30 For discussions of the problems of a transition to a consumption tax and the two approaches discussed here, see Department of the Treasury, Blueprints for Basic Tax Reform, pp. 204-212; and Graetz, "Expenditure Tax Design," pp. 261-275.

consumption would be tax exempt under this approach, tax rates on the remaining consumption would have to be commensurately higher. Moreover, many wealthy people would be able to support themselves indefinitely from their stock of existing wealth and hence pay no consumption tax, perhaps for their entire lifetimes. Under the income tax, tax would have been due on the income earned on existing wealth. Upon enactment of a consumption tax under the prepayment approach, the after-tax yield on assets would increase immediately, conferring windfall gains on asset owners because additional wealth could accumulate much faster than under the income tax. Those holding wealth on the date of enactment would thus suddenly find themselves in a much better financial position compared to those whose earnings come only from wages and salaries and who consume all or most of their income each year.[31]

Under the second approach, all existing wealth would be included in receipts in the first year of the consumption tax, so consumption from that wealth would be fully taxed. This approach would require taxpayers to divulge their net worth on the transition date. Taxpayers would have an incentive to conceal their wealth in order to finance tax-free consumption in later years, and even if they did report all of their wealth, doing so would impose a large one-time administrative cost on the taxpayers themselves, financial institutions, and the IRS. In addition, it might be considered unfair to tax consumption from wealth that had been saved from previously taxed income. The total federal tax burden of people now retired and those about to retire, for instance, would exceed what they had expected, and they would have little opportunity to compensate through added work or saving.[32] The added tax due under this approach in the early years following enactment, however, would be gradually offset (and eventually more than offset) by the tax exemption of the return to saving that is inherent in consumption taxation. Sixteen years after enactment of a consumption tax, for instance, a 50 percent bracket taxpayer who had earned a 10 percent return on his savings would be able to finance more consumption after-tax under the consumption tax (even though his wealth had been taxed as an initial receipt in the year of enactment) than under

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31 Eventually, the flow of additional dollars into saving would reduce yields on savings, and the concomitant additional investment would increase workers' productivity and hence wages, possibly leading to somewhat higher after-tax wages than under the income tax.

32 On the other hand, current retirees are, as a group, receiving a very good return on their contributions to the Social Security system, and savings accumulated in pension programs, IRAs, and Keogh Accounts have not yet been taxed.

the income tax.[33] Those not needing to tap their savings for a long time, therefore, would not be adversely affected by this kind of transition rule. To ease the transition for the elderly who would be hard hit by this approach, large personal exemptions for the elderly could be enacted for a temporary phase-in period.

Although each of these approaches to the transition has serious problems, other alternatives would probably be too complex to be practical. One such complicated alternative was suggested by Treasury Department staff in 1977.[34] They proposed taking the prepaid approach but requiring taxpayers to calculate their tax under both the consumption and income taxes and pay the higher amount each year during a ten-year transitional period before the income tax was eliminated entirely.

Just as with imposition of a comprehensive income tax, imposition of a consumption tax would reduce the wealth of those owning assets that currently receive preferential income tax treatment. Also as with a comprehensive income tax, policymakers would have to decide whether and how to tax income that had accrued but not been taxed under the income tax. For instance, capital gains that had accrued but not been realized and hence not taxed should, in theory, be taxed on the enactment date of a consumption tax. To do so would be extremely difficult administratively, however.

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33 At the end of 15 years, $100 invested in a 10 percent account would have grown to $208 if the return was taxed annually under an income tax at a 50 percent rate ($100 x $(1.05)^{15}$ = $208). If the $100 were treated as an initial receipt under the consumption tax, and then reinvested, it would grow to $418 at the end of the fifteenth year ($100 x $(1.10)^{15}$ = $418), and after payment of a 50 percent consumption tax, $209 would be left for consumption. After 15 years, the potential consumption out of accumulated wealth would be greater under the consumption tax than under the income tax. If the market interest rate was 4 percent instead of 10 percent, it would take a much longer time--36 years--for the accumulated earnings under the consumption tax to exceed those under the income tax. Moreover, those at or close to retirement on the enactment date would probably not live long enough to recoup the loss. (Example modeled after example in Blueprints for Basic Tax Reform, p. 207.)

34 Department of the Treasury, Blueprints for Basic Tax Reform, pp. 209-210.

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International Problems

Some international problems would arise because no other country taxes individuals exclusively on the basis of their consumption.[35] It would be difficult, for instance, to prevent people from earning income in the United States and retiring elsewhere to consume it.[36] Likewise, it would seem unfair to require resident foreigners who had earned their income in a country that taxed income to pay tax on their consumption here. In addition, it would be extremely difficult to renegotiate the many tax treaties with other countries.

Wealth Accumulation and Concentration

Under a consumption tax, people who could and did save large portions of their incomes would pay less tax than under an income tax. Therefore, they would find it easier to amass sizeable holdings. Further, those who had already accumulated wealth could reinvest their investment earnings without having to pay tax. Although enactment of a consumption tax might cause all taxpayers to increase their savings and wealth, many tax analysts believe that the distribution of wealth would change, and that wealth would become more concentrated. To offset any growing concentration, the consumption tax could be supplemented by a substantial tax on gifts and estates. Some supporters of a consumption tax argue, however, that estate and gift taxes run counter to the rationale for a consumption tax.

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35 Some countries, do, however, rely heavily on value-added taxes. The effective tax rate on income from capital now varies widely from country to country. In the United Kingdom, it is only about 4 percent, for instance, compared to about 36 percent in Sweden, 37 percent in the United States and 48 percent in Germany. (Mervyn King and Don Fullerton, eds., "Comparisons of Effective Tax Rates," in The Taxation of Income from Capital: A Comparative Study of the U.S., U.K., Sweden and West Germany, Discussion Paper 38 (Princeton University, Woodrow Wilson School of Public and International Affairs, December 1982), Table 17.1.) For a complete discussion of international problems and possible solutions, see Graetz, "Expenditure Tax Design," pp. 248-255.

36 A tax on emigration could be imposed if this were considered a serious problem. Moreover, most Americans would probably not consider leaving the country simply to save tax. In fact, currently Americans can avoid income tax more easily by simply moving their assets to tax havens (Ibid., p. 254).

DISTRIBUTION OF THE TAX BURDEN UNDER A CONSUMPTION TAX

A consumption tax could be designed to be as progressive as desired--progressive, that is, with respect to consumption, the base of the tax. If saving rates (as a fraction of income) by income class were known, a consumption tax could also be designed to be as progressive as desired with respect to income. Unfortunately, little reliable data exist on individuals' saving patterns, so any attempt to design a consumption tax with any given degree of progressivity relative to income would be only an approximation.[37]

Even with these limitations, when the Treasury Department outlined a proposed consumption tax in 1976, it used the data available to design a rate schedule that would maintain, as closely as possible, the amount and distribution of the liabilities of the then-current income tax.[38] The rate schedule designed consisted of three brackets with marginal rates of 10, 28, and 40 percent for joint returns. The base of this consumption tax, while of course smaller than the base of a comparably comprehensive income tax, was 23 percent larger than the combined bases of the corporate and individual income taxes at that time.[39] This was, therefore, a comprehensive consumption tax; many items (such as charitable contributions) would have been taxed even though they are not taxed under the current income tax.

To the extent that the Congress enacted special tax preferences under a consumption tax, rates would have to be that much higher to compensate. Even though a consumption tax can be designed to preserve roughly the overall distribution of the tax burden, many individuals would find themselves losers or gainers. In a given year, within any given income group, those who saved a large portion of their income would gain, and those who spent a large portion would lose. More generally, those who consumed early in life would lose, while those who saved and consumed late in life or left large estates would gain.

The Congressional Budget Office (CBO) made a rough attempt to update the Treasury work in this area. With the same basic goals in mind,

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37 This would not be a serious problem if consumption was chosen as the tax base precisely because it was thought to be the fairer base. In that case, the goal would be progression with respect to consumption rather than income.

38 Department of the Treasury, Blueprints for Basic Tax Reform.

39 Ibid., p. 169

but replicating the total revenue yield and income distribution of the current tax system in 1984 (including fully phased-in provisions of the Economic Recovery Tax Act), rate schedules for a broad-based consumption tax and a narrow-based consumption tax were devised. Under the broad-based tax, no itemized deductions would be allowed and nominal capital gains would be taxed in full. The rates on consumption under this tax would range from 10 to 35 percent, in five brackets, as shown in Table 17.[40] Table 16 also shows the rates that would be required if current tax law, with its narrow tax base, were maintained but all savings were deductible. In this case, rates would have to be higher, ranging from 10 to 60 percent.

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40 Like the Blueprints rates, these rates are "gross" or "tax inclusive" rates (see footnote 12 for a definition of gross tax rate).

TABLE 17. MARGINAL CONSUMPTION TAX RATES AND TAXES DUE BY INCOME (TAX RATES DESIGNED TO MATCH PROJECTED 1984 CURRENT LAW REVENUES AND DISTRIBUTION OF TAX BURDEN)

Taxable Consumption (In dollars)	Broad-Based Consumption Tax[a]		Narrow-Based Consumption Tax[b]	
	Marginal Tax Rate[c] (In percents)	Tax Due at Bracket Bottom (In dollars)	Marginal Tax Rate[c] (In percents)	Tax Due at Bracket Bottom (In dollars)
0- 2,100	10	0	10	0
2,100- 4,200	10	210	10	210
4,200- 8,500	10	420	10	420
8,500- 12,600	15	850	25	850
12,600- 16,800	25	1,465	30	1,875
16,800- 21,200	30	2,515	40	3,135
21,200- 26,500	30	3,835	40	4,895
26,500- 31,800	30	5,425	50	7,015
31,800- 42,400	30	7,015	50	9,665
42,400- 56,600	30	10,195	50	14,965
56,600- 82,200	35	14,455	50	22,065
82,200-106,000	35	23,415	50	34,865
106,000-159,000	35	31,745	55	46,765
159,000-212,000	35	50,295	60	75,915
212,000 +	35	68,845	60	107,715

SOURCE: Congressional Budget Office.

a. Taxable consumption equals adjusted gross income under current law less personal exemptions and zero bracket amount, less estimated net saving, plus excluded portion of nominal long-term capital gains. Estimated saving rates range from -217.0 percent of gross income for those below $2,000 of income to 31.8 percent for those above $50,000, with an average of 11.3 percent. (The average saving rate nationwide is lower than 11.3 percent because it is based on the saving of all Americans, including the many low-income people whose saving rates are very low and who do not file tax returns.)

b. Taxable consumption equals taxable income under current law, less zero bracket amount, less estimated net saving.

c. Gross or tax-inclusive rate.

CHAPTER VII. CONCLUSION

The preceding three chapters outlined in broad form the advantages and disadvantages of three possible major changes in the individual income tax system:

- o Broadening the income tax base and reducing marginal tax rates;
- o Indexing the income tax base for inflation; and
- o Taxing consumption instead of income.

The three approaches are summarized in Table 18. If the Congress decided that consumption was a better tax base than income, base indexing would be unnecessary, because all accounting would be done for current periods only. If the Congress wanted to tax income rather than consumption, it would need to decide whether to broaden the tax base and whether to index the base for inflation. Base broadening and indexing could be done separately, or both could be done together.

Retention of the current tax, which is neither a pure income nor a pure consumption tax, is also a possibility, of course, as are incremental changes in the direction of any of the major options. If comprehensive income tax base broadening was considered too radical a change, for instance, the base could be broadened incrementally by eliminating selective tax preferences. Similarly, steps could be taken to move the tax further toward a consumption tax, perhaps by excluding a specified percentage of interest income from taxation and allowing only the same percentage of interest paid to be deducted.[1] Under a pure indexed income tax, income from capital would be taxed at the same rate as wage and salary income, whereas most income from capital would not be taxed at all under a consumption tax. Indexing the income tax base while retaining tax preferences for capital income can be thought of as an intermediate step.

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1 Another proposal--to expand Individual Retirement Accounts by raising ceilings on annual contributions and relaxing or removing penalties for early withdrawal--cannot be implemented alone without creating oppportunities for tax arbitrage. In other words, taxpayers would be able to profit through the tax system without increasing their net savings simply by borrowing and taking a tax deduction for the interest payments and investing the borrowed proceeds in an IRA in which the earnings would be effectively tax free.

TABLE 18. HIGHLIGHTS OF THREE MAJOR APPROACHES TO CHANGING THE INCOME TAX SYSTEM

Option	Steps Needed to Implement Change	Effects of Change on	
		Simplicity	Efficiency
Broaden the Income Tax Base and Reduce Marginal Tax Rates	Reduce or eliminate special tax deductions, exclusions, exemptions and credits, and reduce marginal tax rates, possibly to one, flat rate.	Eliminating deductions makes tax simpler. Taxing income not now taxed could be complex in some cases, such as fringe benefits and imputed income on owner-occupied housing. Rate reduction would reduce incentive for tax avoidance.	Taxing all sources of income equally and reducing marginal tax rates improves allocation of resources among investments. Reducing marginal tax rates probably increases work and saving, although net effect on saving depends also on impact of loss of savings and investment tax incentives.
Index the Income Tax Base for Inflation	Adjust initial purchase prices of assets for inflation in calculating depreciation, capital gains, and cost of goods used from inventory. Tax only real interest income and allow only real interest expense to be deducted.	All changes would introduce new complexity, although this could be partly offset by simultaneous repeal of tax preferences.	Indexing, with repeal of savings and investment tax incentives, ensures that all capital income is taxed equally, so investment funds flow to highest before-tax returns.
Tax Consumption Instead of Income	Allow deductions for all net saving, including purchases of stocks, bonds, and other income-producing assets, deposits to savings accounts, and debt repayment. Tax new borrowing and full proceeds from sales of assets. Eliminate special tax deductions, exclusions, exemptions, and credits.	Eliminates need for depreciation and inventory accounting, tax base indexing, and defining, measuring, and taxing capital gains. Increases incentive to avoid tax due on sale of assets.	Easy integration with corporate tax. Eliminating tax preferences improves allocation of resources among investments. Eliminating tax on saving improves allocation of resources among time periods. Increase in marginal tax rate compared to equally comprehensive income tax lessens incentive to work in order to purchase current consumption goods.

(Continued)

TABLE 18. (Continued)

Option	Effects of Change on Equity	Effects of Change on Redistribution of Tax Burden	Major Problems That Would Remain
Broaden the Income Tax Base and Reduce Marginal Tax Rates	Generally improves equity since taxpayers with equal income pay equal tax, but can worsen equity if provisions relieving hardship are eliminated. Rate reduction could change the progressivity of the tax.	Taxes rise for those who now make heavy use of preferences or who are now eligible for special tax relief; taxes fall for those who do not use current provisions. Rate reduction could change progressivity of tax. Flat rate tax would probably reduce taxes for high-income and raise them for middle-income taxpayers.	Administratively infeasible to broaden tax base completely, so some income, such as fringe benefits and home production, remains lightly taxed. Real tax depends on inflation unless base is indexed. Complete integration with corporate tax difficult. Compliance still a problem. Difficult to disallow business deductions taken for personal expenses.
Index the Income Tax Base for Inflation	Improves equity since taxpayers with equal real incomes pay equal tax (assuming special tax provisions are also eliminated). Prevents tax rates on real income from exceeding 100%. Eliminates dependence of real tax rates on inflation. Unless accompanied by repeal of tax incentives for saving and investment, reduces taxes for wealthy and hence reduces progressivity.	Assuming no other change in tax law, taxes rise for current net borrowers, including many businesses and homeowners with mortgages. Taxes fall for those with capital gains and interest income on existing assets.	Unless indexing is comprehensive, equity and efficiency could be worsened rather than improved.

(Continued)

TABLE 18. (Continued)

Option	Effects of Change on: Equity	Effects of Change on: Redistribution of Tax Burden	Major Problems That Would Remain
Tax Consumption Instead of Income	Any degree of progressivity is possible through graduation of tax rates. Effect on equity depends on whether consumption or income is considered fairer tax base. Arguments in favor of consumption tax: annual consumption is a proxy for average lifetime income; consumption tax does not tax saving twice; income tax penalizes those who save early in life. Arguments in favor of income tax: potential command over goods and services best measures ability to pay tax and all income could potentially be spent; concentration of wealth could increase under consumption tax.	Within each income group, taxes fall for those who save early in life, taxes rise for those who always spend nearly all their income. Since most people borrow in youth, save in middle age, and draw down savings in retirement, their taxes would increase during youth and old age and fall in midlife.	Pressure might not abate for special tax provisions. Difficult to prohibit some personal consumption from being deducted as business investment. Compliance still a problem, and proper taxation of family vs. individual still difficult to decide.

CORPORATE TAX

Any of the three major changes discussed above would logically require corresponding changes in the corporate income tax. If the base of the individual income tax was broadened, it would make sense to broaden the base of the corporate tax to eliminate special business tax provisions. Otherwise, individuals would form personal corporations to take advantage of corporate tax preferences. As individual tax rates could be reduced substantially with base broadening, so corporate rates could also be reduced. Moreover, it might be appropriate to integrate partially the corporate and individual taxes to eliminate the double tax on corporate dividends.

If the base of the individual income tax is indexed comprehensively, the same changes should be made in the corporate tax. It would be logical to index interest, depreciation, and the cost of goods used from inventory for corporations if this was done for partnerships and the self-employed under the individual income tax. Otherwise, the tax system would be extremely complex and taxpayers would rearrange their affairs to have income taxed at the lowest rate possible.

The options for the corporate tax under a consumption tax were explored briefly in Chapter VI. Although a corporate income tax could be retained during a transition period, or permanently to tax foreigners on income earned in the United States, most consumption tax proposals call either for elimination of the corporate tax or conversion to a cash-flow corporate tax modeled on the individual consumption tax.

STATE GOVERNMENTS

States would, of course, benefit from any salutary economic effects produced by major changes in the income tax. By the same token, they would be hurt by any economy-wide dislocation caused by the transition to a new tax. Repeal of federal tax deductions for state taxes and the federal tax exemption of interest on state bonds would also hurt state governments, unless offset by increases in other federal assistance to the states.

Federal tax changes would affect those states that link their state income taxes to the federal tax.[2] Some states simply charge their residents a percentage of federal income tax liability. Those states would

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2 As of October 1982, 34 states used federal taxable income as the base of the state income tax. (State Tax Handbook (Chicago: Commerce Clearing House, October 1982), p. 666.)

probably be unaffected by the change unless the total yield of the federal tax changed, and even then states could change their tax rates (as percentages of federal tax liability). Other states model their taxes on federal tax law but modify it somewhat by denying certain federal deductions or credits and allowing others not allowed on federal taxes. Those states would have to decide whether to change their taxes to mirror federal changes.

To the extent that states did not change their taxes to conform to the newly designed federal tax, some of the beneficial effects of the new federal tax would be lost. Retention of state tax preferences for certain kinds of investment, for instance, would offset the neutrality that could be achieved by redesign of the federal tax. Similarly, high or steeply graduated state tax rates would offset the beneficial effects of reduced federal rates.

MAJOR LEGISLATIVE PROPOSALS

Although indexing capital gains and depreciation has been considered by the Congress, no comprehensive base indexing legislation has been proposed. By contrast, legislation has been proposed recently to broaden the income tax base or to enact a flat-rate consumption tax. An example of each type of legislation is given below.

Bradley-Gephardt Bill (S. 1421 and H.R. 3271)

Of the many bills introduced in both houses to broaden the income tax base (some of which also call for enactment of one, flat tax rate), the one introduced by Senator Bradley and Representative Gephardt has received the most attention to date. Bradley and Gephardt would broaden the income tax base by eliminating many special tax provisions while retaining in limited form several of the largest, including the deductions for home mortgage interest, charitable contributions, large medical expenses, and state and local income and property taxes. In addition, they would retain the tax exemption of Social Security and veterans' benefits and interest on municipal bonds issued for public purposes. This bill would raise the personal exemption and zero bracket amounts and collapse the tax brackets into four brackets, with a maximum tax rate of 30 percent.

Because the proposal would retain many of the special provisions currently in the law, it would insulate beneficiaries of those provisions from much of the hardship they would experience in moving to a truly comprehensive income tax. Homeowners, charitable institutions, retirees, veterans, and state and local governments would be somewhat protected.

On the other hand, retention of special provisions would preclude maximum reduction of tax rates and continue some economic distortions such as that caused by tax preferences for investment in owner-occupied housing. At the lower tax rates in the proposal, however, these distortions would be lessened. Bradley and Gephardt would not integrate the corporate and individual taxes or index the income tax base for inflation.[3] Nominal capital gains would be taxed in full, but not at a rate above the top statutory rate of 30 percent. The retained deductions would be equivalent to tax credits of 14 percent for all taxpayers.[4]

Hall-Rabushka Proposal (S. 557)

Senator DeConcini has introduced a bill for a flat-rate tax formulated by economists Robert Hall and Alvin Rabushka.[5] Although not precisely a consumption tax, the Hall-Rabushka plan is more like a

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3 Bradley and Gephardt would tax all corporate income at the rate of 30 percent and repeal many business tax preferences.

4 A 14 percent tax would be applied to all net taxable income, with 12 and 16 percent surtaxes applied to total income (adjusted gross income) exceeding $25,000 for single taxpayers and $40,000 for married taxpayers. Taxpayers would first calculate adjusted gross income by totaling all income except that excluded from tax, such as Social Security and veterans' benefits and municipal bond interest. They would then subtract the retained deductions to calculate net taxable income. Tax would be due on 14 percent of taxable income. In addition, for those married taxpayers whose adjusted gross incomes exceeded $40,000 ($25,000 for single taxpayers), a surcharge would be applied to adjusted gross income. In essence, therefore, the deductions would be taken at a 14 percent rate for all taxpayers, since the deductions would enter into the calculation only of taxable income and not of adjusted gross income subject to the surcharge. Taxpayers having to pay the surcharge (roughly 20 percent of all taxpayers, according to Bradley and Gephardt) would no longer take deductions at the taxpayer's top marginal tax rate. Thus, taxpayers who now deduct mortgage interest and state and local taxes at rates up to 50 percent would pay a much greater percentage of those deductible expenses out of pocket, since they would be eligible for deduction at only the 14 percent rate. Since the retained deductions would apply at the rate of 14 percent to all taxpayers, they would be equivalent to 14 percent nonrefundable tax credits.

5 Robert Hall and Alvin Rabushka, Low Tax, Simple Tax, Flat Tax (New York: McGraw Hill Book Company, 1983). The book describes the

consumption than an income tax. Because of the flat tax rate, the proposal would very easily integrate the corporate and individual taxes. The plan calls for a single tax rate of 19 percent on both business and individual incomes.

Individuals would pay tax on all wages and salaries but not on interest, dividends or capital gains, and would be allowed no deductions or tax credits aside from a personal deduction. Excluding interest, dividends and capital gains from tax and disallowing interest deductions makes the tax a consumption tax in which all individuals are essentially required to use the prepayment method. According to Hall and Rabushka, the tax would be simple enough that most taxpayers' returns would be only a page long.

The new business tax would use the cash-flow approach, like the consumption tax, and would be imposed on all businesses, regardless of the form of ownership--corporate, partnership, or sole proprietorship. Businesses would be taxed on all sales but would deduct in full all purchases of plant, equipment, and goods in the year of purchase. They would also be able to deduct wages and salaries paid to employees, but not interest expense or fringe benefits provided to employees. The return to new business investment would essentially be tax-free, but tax would continue to be collected at the 19 percent rate on the return to business investments made prior to the effective date.

TRANSITIONAL CONSIDERATIONS[6]

Enacting any major change in the income tax would cause dislocation for many individuals, businesses, and institutions. Planning based on old

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Hall-Rabushka proposal, the motivation behind it, and the beneficial effects the authors expect would follow its enactment.

6 For more complete discussions, see Treasury Department, Blueprints for Basic Tax Reform (January 17, 1977), pp. 181-215; Joint Committee on Taxation, Analysis of Proposals Related to Broadening the Base and Lowering the Rates of the Income Tax (September 24, 1982), pp. 29-32; John Bossons, "Indexation After the Lortie Report" (Toronto: Institute for Policy Analysis, November 23, 1983); Michael Graetz, "Legal Transitions: The Case of Retroactivity in Income Tax Revision," University of Pennsylvania Law Review (1977), pp. 47-87; and "The 1982 Minimum Tax Amendments As a First Step in the Transition to a 'Flat-Rate' Tax," Southern California Law Review (January 1983), pp. 527-571.

tax law would be disrupted, asset values and incomes would rise or fall, depending on the change in their tax treatment, and the finances of currently tax-favored businesses, charities, and state and local governments could worsen.[7] The transition to a new tax, therefore, would probably be difficult.

It is debatable whether those who would suffer from a tax change should be compensated.[8] People know that tax law is often changed. In fact, yields of assets likely to lose preferential tax status rise to compensate owners for that possibility. Under these circumstances, direct government compensation, such as the extension of the old law tax treatment for owners of these assets on the enactment date, can amount, in essence, to overcompensation. Nevertheless, the Congress has in the past routinely enacted provisions to ease the transition to new tax law in an effort to relieve hardship for those who made decisions relying on a continuation of old law.

In addition to relieving hardship and allowing people time to plan for and adjust to a revision in tax law, transition rules can be used to prevent income from escaping taxation and to ensure that income is not taxed twice. For instance, transition rules can be used to tax on a one-time basis capital gains that had been earned but not taxed on the enactment date of the new law, or to ensure that, under a consumption tax, consumption financed from previously taxed income would not be taxed again. By their very nature, transition rules add complexity to tax law, but this complexity could be held to a minimum. Moreover, the rules should not create incen-

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7 Repeal of preferential tax treatment for an asset would reduce demand for it, immediately driving down its price. Over time, however, the supply of the asset would contract, raising the market price part way towards its initial level. For estimates of the redistribution of wealth that might result from enactment of a flat-rate tax, see Robert Tannewald, "Redistribution of Wealth in Conversion to a Flat Rate Tax," New England Economic Review (January/February 1983), pp. 5-17.

8 Graetz argues that it is no more appropriate to compensate investors for losses resulting from tax law changes than for losses resulting from market changes. In both cases, the losses reflect changes in society's tastes and preferences; in one case the vehicle for expression of the tastes is the marketplace, while in the other it is the political process. Similarly, few would consider compensating companies whose government contracts are not renewed. For an elaboration of these and other arguments against compensation, see Graetz, "Legal Transitions," pp. 64-66, 74-79.

tives for taxpayers to engage in unproductive behavior solely to reduce their taxes.[9]

There are several approaches to easing the transition: grandfathering, delaying the effective date of the new law, and phasing in the new provisions.

Grandfathering. Old law tax treatment could be permitted for transactions entered into before the new law's effective date. For instance, if the mortgage interest deduction was repealed, an exception could be granted for mortgages in place on the effective date. As is clear from this example, grandfathering could effectively prevent the new law from being completely enacted for many years (up to 30 years in the case of home mortgages). This would make the tax extremely complex and could cause a large revenue loss or prevent tax rates from being reduced as much as possible. Moreover, even this kind of grandfathering would not insulate taxpayers from losses stemming from the tax change. In this example, for instance, housing prices could drop generally if the mortgage interest deduction was not available on new purchases, so the value of a house could fall even though its present owners would still be able to deduct their mortgage interest.

Grandfathering would provide windfall gains to people holding tax-favored assets on the new law's enactment date. Since the stock of those assets would be fixed, scarcity would drive up their values. Moreover, if grandfathering applied only to owners on the effective date, owners would hold those assets longer than economics alone would dictate. Grandfathering only deductions for interest on mortgages held on the effective date, for instance, would discourage those homeowners from moving and would reduce the mobility of the labor force.

Delaying the Effective Date. The new tax law could be enacted with a delayed effective date so that its provisions would not go into effect until some future date. This would give taxpayers time to rearrange their financial affairs in anticipation of the change.[10] Again, however, asset prices would be expected to adjust immediately, because of the expectation of a changed tax treatment. Moreover, lengthy delays could introduce

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9 Joint Committee on Taxation, "Analysis of Proposals," pp. 30-31; and Treasury Department, Blueprints for Basic Tax Reform, pp. 186-187.

10 For instance, if fringe benefits were going to be taxed, employers might want time to restructure compensation packages to include more cash and fewer fringe benefits. (Joint Committee on Taxation, "Analysis of Proposals," p. 31.)

much uncertainty since taxpayers might expect the Congress to modify the new law before its enactment date.[11]

Phasing in New Provisions. The new provisions could be phased in gradually over a period of years.[12] In moving to a pure consumption tax, for instance, increasing percentages of interest income could be excluded from tax each year, while increasing percentages of interest expense were disallowed.

Probably some combination of the three transitional approaches would be used in any major change. Although they would ease the transition, they would all complicate the tax and delay any beneficial effects that would eventually result from the new law.

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11 Graetz made this point about enacting a broad-based income tax with a delayed effective date:

> Because of the necessary elimination of tax-favored treatment of a broad range of assets and the ability of currently benefited special interest groups to mobilize their arguments for continuation of favored treatment during the delay, the practical likelihood of moving to a broad-based income tax via a delayed effective date provision seems slight. (Graetz, "The 1982 Minimum Tax Amendments," p. 542.)

12 This approach to the transition to a broad-based income tax is explored in Graetz, "The 1982 Minimum Tax Amendments."

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APPENDIX

APPENDIX. BENEFIT, SACRIFICE, AND ABILITY-TO-PAY THEORIES OF TAXATION

This appendix briefly summarizes the benefit, sacrifice, and ability-to-pay theories of taxation, which are commonly cited to support progressive income taxation.

BENEFIT THEORY

According to the benefit theory of taxation, each citizen's taxes should be proportional to the benefits received from government. Opinions vary as to whether government benefits increase more or less than proportionately with income, however, so this standard provides little practical guidance. It is particularly difficult to allocate the benefits of basic government services like police and fire protection. In addition, a significant share of government spending is for income maintenance and other programs for the poor, programs whose income redistribution rationale conflicts directly with the benefit theory.[1]

SACRIFICE THEORY

The proportionate sacrifice standard is the one that has received the most support during the past century as a justification for income tax progressivity. By this standard, the fairest tax is one that elicits proportionate sacrifice and, therefore, leaves all taxpayers equally worse off. Intuitively, it seems natural that only a progressive tax would impose proportionate sacrifice on all taxpayers, since a dollar taken in tax seems to inflict more hardship on a person of low income than on a person of high income. In fact, this is generally true if three premises hold: that well-being is a function of money, that each additional dollar of income provides less additional satisfaction than the last, and that the functional relationship between money and well-being is the same for all taxpayers. Blum and Kalven and others who reject the sacrifice theory do so because they feel uncomfortable making the bold interpersonal comparisons that these prem-

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1 Persuasive arguments can be made for charging user fees for many government services. That is a separate issue, however, from the more general one of the appropriate degree of progressivity in the entire income tax.

ises require.[2] Moreover, accepting the premises and the progressivity that follows is not sufficient to devise the best progressive rate structure. Only if the common mathematical relationship between well-being and money is known, can the optimal rate structure be devised. Of course, arguing that the correct degree of progressivity is indeterminate, or even that the correctness of progressivity is unverifiable, is not to conclude that a proportionate or flat-rate tax is the best choice.

ABILITY-TO-PAY THEORY

Progressive income taxes have also been justified on the theory that ability to pay tax increases more rapidly than income. Blum and Kalven argue that ability to pay can be nothing other than ability to bear a sacrifice and so reject ability to pay for the reasons just described.[3]

Nevertheless, ability to pay is often cited by legislators and the public in defense of a progressive income tax. Even though it cannot be proved unassailably that ability to pay tax increases faster than income, it can be adopted by an open democratic process as a workable proposition, if that view is held by a majority of the population.

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2 The sacrifice principle discussed in the text is that of "proportionate sacrifice," under which the ideal tax is one that reduces each taxpayer's well-being (utility) by the same percentage. Blum and Kalven favor the proportionate sacrifice principle over the principles of equal sacrifice and minimization of aggregate sacrifice. "Equal sacrifice" is attained when each taxpayer loses the same number of units of well-being. The conditions under which a progressive tax is needed to attain equal sacrifice are more restrictive than the three conditions spelled out in the text. In order to minimize the aggregate loss in satisfaction for all individuals, a tax would have to leave all taxpayers with equal income, assuming that the three premises put forth in the text hold true. (For elaboration of the three sacrifice principles, see Blum and Kalven, The Uneasy Case for Progressive Taxation (Chicago: University of Chicago Press, 1953), pp. 39-44, 49-55.)

3 Blum and Kalven, The Uneasy Case for Progressive Taxation, p. 64.

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